WEST CHESTER UNIVERSITY



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Graduate Catalog 1995-96



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West Chester University **Graduate Catalog**1995-1996

Frederick Douglass Commemorative Celebration

In 1995, West Chester University becomes the site for a centennial celebration of the life and work of Frederick Douglass (1818-1895). The commemoration is entitled "The Life and World of Frederick Douglass" and will span a two-year period, beginning in May 1994 and extending throughout 1995, with follow-up activities. Douglass was a nineteenth-century slave who escaped bondage to become one of the distinctive voices for liberty in American history.

Frederick Douglass was a frequent visitor to the West Chester area. He delivered addresses at Horticultural Hall (now called the Chester County Historical Society) on July 14, 1865 and November 15, 1875 and, about 40 years prior to his last visit to West Chester, he addressed a gathering of townspeople assembled in front of the old Market House. During that occasion he was the guest of Hannah and Mary Darlington, who operated a boarding house on 108 West Gay Street.

On February 1, 1895 Douglass, at the invitation of Dr. George Morris Philips, principal of then West Chester Normal School, delivered on campus what would be his last public lecture. A review of his talk appeared the next day in the *Daily Local News*. Philips, a dedicated antiquarian, enjoyed aquaintanceships with celebrated figures of his time. Dr. Philips' private library contained many autographed copies of texts signed by authors like Douglass who were also guests in his home. When Douglass was participating in the World's Columbian Exposition in May 1893, he graciously wrote Dr. Philips to let him know that he was aware of the former's request for a signed copy of his *Life and Times*. The following January, Douglass complied with Dr. Philips' request and sent the book with a cordial letter, which in turn led to an invitation for Douglass to speak in West Chester. Initially Douglass was forced to decline the offer because of his failing health. He eventually made the trip to West Chester in February 1895 when he delivered his final public speech of record.

Communications Directory

MAILING ADDRESS: West Chester University

West Chester, PA 19383

TELEPHONES: Dial 436 plus number in parentheses.

For offices not shown here, call the University Information Center:

610-436-1000.

Admissions Office of Graduate Studies and Sponsored

Research, Old Library* (2943)

Affirmative Action Director of Affirmative Action, Lawrence

Center (2433)

Billing/Payments Office of the Bursar, Elsie O. Bull Center

(2552)

Bookstore Student Services Inc., Sykes Student Union

(2242)

Careers/Placement Director of Career Development Center,

Lawrence Center (2501)

Continuing Education Dean of University College, Elsie O. Bull

Center (3550)

Director of Adult, Evening, and Alternative Studies, Elsie O. Bull Center (3550)

Counseling Center, Lawrence Center (2301)

Financial Aid/Work Director of Financial Aid, Elsie O. Bull

Study Center (2627)

Graduate Studies/ Dean of Graduate Studies and Sponsored

Catalogs Research, Old Library* (2943)
Housing Residence Life, Sykcs Student Union

(3307)

Police Public Safety Department, Peoples

Maintenance Building (3311)

Public Relations Director of Public Relations, Smith House

(3383)

Scheduling/Registration Office of Graduate Studies and Sponsored

Research, Old Library* (2943)

Student Services, Inc. Sykes Student Union (2955)

Summer Sessions Director of Summer Sessions, Elsie O.

Bull Center (2230)

Teacher Certification Teacher Certification Office, Recitation

Hall (2426)

Undergraduate Catalogs Office of Admissions, 100 West Rosedale

(3411)

University Events/ Student Programming Dept./Student Student Activities Activities Council (2983) or Sykes

Union Information Desk (2984)

Nondiscrimination/Affirmative Action Policy

West Chester University is committed to providing leadership in extending equal opportunities to all individuals. Accordingly, the University will continue to make every effort to provide these rights to all persons regardless of race, religion, sex, national origin, ancestry, age, marital status, sexual orientation, disability, or veteran status. This policy applies to all members of the University community, including students, faculty, staff, and administrators. It also applies to all applicants for admission or employment and all participants in University-sponsored activities.

This policy is in compliance with federal and state laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990, and Executive Order of the Governor of Pennsylvania.

Any individual having suggestions, problems, complaints, or grievances with regard to equal opportunity or affirmative action is encouraged to contact the director of affirmative action, 104 Lawrence Center, 610-436-2433.

Sexual Harassment Policy

West Chester University is committed to equality of opportunity and freedom from discrimination for all its students and employees. Based on this commitment and the recognition that sexual harassment is a form of discrimination, which is of a growing concern to the higher education community, the University provides the following policy:

Harassment on the basis of sex is a violation of Title VII of the U.S. Civil Rights Act, Title IX of the Educational Amendments of 1972, and of the Pennsylvania Human Relations Act. Because West Chester University is committed to establishing an environment free from discrimination and harassment, sexual harassment will not be tolerated in any form. Upon official filing of a complaint, immediate investigation will be made culminating in appropriate corrective action where warranted, which may include termination of the relationship with the University.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature occurring when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, or of a student's academic status or treatment;
- submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting such an individual; or
- 3. such conduct creates an intimidating, hostile, or offensive living, working, or academic environment to a reasonable person.

A complete copy of the University's Sexual Harassment Policy document, inclusive of the investigatory procedures, may be obtained from the Affirmative Action Office.

Individuals who believe themselves to be the victims of sexual harassment, or who have questions about the University's policy on this matter should contact the director of affirmative action, 104 Lawrence Center, 610-436-2433.

Accreditation

West Chester University is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The National Athletic Training Association, The National Association of Schools of Music, The National League for Nursing, The American Chemical Society, The Commission on Accreditation in Clinical Chemistry, The Joint Review Committee for Respiratory Therapy Education, and the Council on Social Work Education (baccalaureate level). West Chester University has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

The provisions of this catalog are not to be regarded as an irrevocable contract between the student and the University. West Chester University reserves the right to change any provisions or requirements at any time.

Office of Graduate Studies and Sponsored Research

Old Library Building* Church Street and Rosedale Avenue West Chester University West Chester, PA 19383 610-436-2943 Hours: Monday–Friday

8:30 a.m.-4:00 p.m. 4:30-7:00 p.m.

Tuesday

^{*} Effective fall semester 1995, the Office of Graduate Studies and Sponsored Research will be 102 Rosedale Ave.

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Graduate Programs of Study

Administration

M.S.A. (Concentrations: Health Services, Human Resource Management, Individualized, Leadership for Women, Public Administration, Sport and Athletic Administration, Training and Development, Urban/Regional Planning)

Cooperative degree with Clinical Chemistry

Biology

M.A. Biology

Business

M.B.A. (Concentrations: Economics/Finance, General Business, Management)

M.A. Physical Science (Concentration: Chemistry) M.Ed. Chemistry M.S. Chemistry M.S. Clinical Chemistry

Childhood Studies and Reading

M.Ed. Elementary Education (Concentrations: Creative Teaching-Learning, Early Childhood Education, Elementary Education, Gifted and Talented, Human Development, Language Arts, Reading, Social Studies) Certification in Elementary Education M Ed Reading

Communication Studies

Childhood Studies and Reading

M.A. Communication Studies

Communicative Disorders

M.A. Communicative Disorders

Computer Science

M.S. Computer Science Certificate in Computer Science

Counselor, Secondary, and Professional Education

M.Ed. Elementary School Counseling M.Ed. Secondary School Counseling M.S. Higher Education Counseling M.S. Educational Research Specialist I Certificate in Counseling (Elementary or Secondary) M.Ed. Secondary Education Courses in Environmental Education; Urban

Criminal Justice

M.S. Criminal Justice

English

M.A. English

Foreign Languages

M.A. French M.A. Spanish M.Ed. French M Ed. German M Ed. Spanish

Geography and Planning

M.A. Geography M.S.A. (Concentration: Urban/Regional Planning)

Geology and Astronomy

M.A Physical Science (Concentration: Earth Sciences)

M.S. Administration (Concentration: Health

Health

M.Ed. Health

Services)

M.S. Health

History

M.A. History

Reading Specialist Certification Certificate of Advanced Graduate Study in

M.Ed. History Instructional Media

M.Ed. Instructional Media Education M.S. Instructional Media Teaching Certification for Instructional Media Education

Leadership for Women

M.S.A. (Concentration: Leadership for Women)

Mathematics

M.A. Mathematics (Concentrations: Pure Mathematics, Mathematics Education)

M.A. Music History M.M. Accompanying

M.M. Performance

M.M. Piano Pedagogy

M.M. Music Education

M.M. Music Theory/Composition

Nursing

M.S.N. Community Health Nursing

Philosophy

M.A. Philosophy

Physical Education

M.S. Physical Education (Concentrations: General Physical Education, Exercise and Sport Physiology)

M.S.A. (Concentration: Sport and Athletic Administration)

Physical Science (Interdepartmental)

M.A. Physical Science (Concentrations: Chemistry, Earth Sciences)

Political Science

M.S.A. (Concentration: Public Administration)

Psychology

M.A. Clinical Psychology M.A. General Psychology M.A. Industrial/Organizational Psychology M.A. Group Psychotherapy/Processes (Certification: Psychodrama)

Public Administration

See Political Science

Special Education

M.Ed. Special Education Certification in Special Education

Teaching English as a Second

M.A. Teaching English as a Second Language

The following departments and interdisciplinary areas offer graduate courses, but no graduate degree.

Anthropology and Sociology, Art, Linguistics, Social Work, Theatre Arts, and Women's Studies

Graduate Studies at West Chester

The mission of graduate education at West Chester University is to provide high-quality, accessible graduate degree programs responsive to students' needs for professional development and educational enrichment. The offerings reflect a wide range of master's programs as well as a selected number of specialist and professional growth opportunities. The quality of programs is enhanced by the faculty's accessibility to and interaction with graduate students and by the geographical diversity of the student population. The

graduate programs are integrated with the research, outreach, and developmental functions of the University. The faculty strives to foster excellence in teaching and to create an intellectual environment that actively supports quality graduate education. The goals of graduate study at this University are:

· to foster an attitude of intellectual and creative inquiry and to develop research and analytical skills that may be applied in a professional setting;

- to increase the professional skills and academic competence of students who show promise of making important contributions to their profession;
- · to prepare students for further graduate study; and
- to meet the needs of college graduates whose career goals have changed.

THE GRADUATE STUDIES PROGRAM at West Chester has grown remarkably since its introduction in 1959. Approximately 2,000 students now attend during the fall and spring semesters; some 1,800 enroll for summer sessions. West Chester University's graduate program is the largest within the 14 Commonwealth-owned institutions of higher learning.

The University began as the West Chester Academy in 1812 and functioned as a normal school from 1871–1927. Since it became a four-year college in 1927, West Chester has developed steadily and is now one of the major comprehensive institutions of higher learning in the Philadelphia vicinity.

Facilities for graduate education are good. The Commonwealth inaugurated an extensive building program in the 1950s which led to the Schmucker Science Center, a block-long complex of buildings including a planetarium, an

astronomical observatory, and modern laboratories; the Elsie O. Bull Learning and Research Center; and the Francis Harvey Green Library, one of Pennsylvania's principal university libraries.

The University offers the Master of Arts, the Master of Business Administration, the Master of Education, the Master of Music, and the Master of Science in approximately 50 disciplines or areas of study.

Master's degree programs such as the M.B.A., the M.A. in communicative disorders, the M.S.A., the M.S. in computer science, and the certificate of advanced graduate study in reading have been designed to meet the particular needs of the times and the area.

In addition to its degree and certification programs, West Chester offers nondegree study in a number of areas including art, linguistics, theatre arts, and women's studies.

For the benefit of in-service teachers and other employed persons, West Chester schedules most of its graduate classes during late afternoons and evenings.

Graduate Summer Sessions

The 12-week summer sessions are divided into three periods: the presession of three weeks, the regular session of six weeks, and the post-session of three weeks. Most pre-session classes meet in the evenings; almost all classes for the other two sessions meet during the daytime. (To apply, see "Admission.") Admission to summer sessions courses does not constitute admission to a degree program.

The Campus

The University is located in West Chester, a community in southeastern Pennsylvania strategically located at the center of the mid-Atlantic corridor. The seat of Chester County government for almost two centuries, West Chester retains much of its historical charm in its buildings and countryside, but offers the twentieth-century advantages of a town in the heart of an expanding economic area. The University occupies 388 acres. The main campus is situated on 97 acres within the Borough of West Chester; the south campus is located on a 291-acre tract in adjacent townships. West Chester was settled in the early eighteenth century principally by members of the Society of Friends. With a population of about 20,000, the borough is small enough to have the pleasant aspects of a tree-shaded American

town, large enough to provide essential services and the substance of a vigorous community, and old enough to give the student first-hand contact with America's early history. The heart of West Chester is its courthouse, a Classical Revival building designed in the 1840s by Thomas U. Walter, one of the architects for the Capitol in Washington, D.C.

Today, West Chester is part of the rapidly growing suburban complex surrounding Philadelphia and offers interesting opportunities for the study of local, county, and regional government in a period of change and growth.

Philadelphia is 25 miles to the east and Wilmington 17 miles to the south of the campus. The libraries, museums, and other cultural and historical resources of both cities are within easy reach. Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historical attractions are near West Chester.

How to Reach West Chester

The Borough of West Chester is easily accessible from all directions both by car and public transportation. Route 3, the West Chester Pike, leads directly into town from center-city Philadelphia. From the Pennsylvania Turnpike, motorists traveling west should take Route 202 south from the Valley Forge Interchange,

while those traveling east can arrive via Route 100 south from the Downingtown Interchange. From the south, Route 202 from Wilmington and Routes 100 and 52 from U.S. Route 1 all lead to West Chester.

Undergraduate Studies

Approximately 9,400 students are enrolled in the University's undergraduate program. The University grants the Associate of Science in two fields, the Bachelor of Science in Education in three basic curricula—elementary education, secondary education, and special education: the Bachelor of Arts in arts and letters, social and behavioral science, the natural sciences, mathematics, and music; the Bachelor of Fine Arts in Studio Arts; the Bachelor of Science in health and physical education, music education, the sciences and health sciences; the Bachelor of Music in theory/composition, performance, and music history; and the Bachelor of Science in Nursing.

The University also offers degree programs that prepare students for specialized work in business administration, computer and information sciences, criminal justice, nursing, social welfare, communicative disorders, and many other fields. The Office of Admissions will supply undergraduate admissions materials upon request.

Admission

Student Responsibility

It is the responsibility of students to know and observe all policies and procedures for their programs. The University will not waive a regulation because a student pleads ignorance of it. Students should give careful attention to the dates relating to application for graduation as well as other pertinent deadlines announced by the department or the Office of Graduate Studies and Sponsored Research.

The Application Procedure

Students with a bachelor's degree from an accredited college or university in the United States or with equivalent preparation acquired in another country are eligible to apply for admission to a graduate program.

- 1. Applications are available from the Office of Graduate Studies and Sponsored Research and, when completed, should be returned there along with all supporting documentation required for admission to a particular degree program.
- 2. Applicants must request all institutions at which they have taken any postsecondary work to submit an official transcript directly to the Office of Graduate Studies and Sponsored Research. West Chester University undergraduate transcripts are available to the Office of Graduate Studies and Sponsored Research; applicants do not need to forward them.
- 3. Applicants should consult with the graduate coordinator of the primary interest area to assure compliance with admission requirements for a particular degree program.

Application Deadline

For most of the graduate programs, recommended deadlines for the submission of completed applications are: April 15–fall semester, October 15–spring semester, and February 15 for graduate assistant applicants.

Some programs have established different recommended application deadlines. Please see application information under individual programs listed in this catalog.

The application and all supporting credentials should be submitted to the Office of Graduate Studies by the deadline dates shown above. Late applications will be accepted; however, admission will be on a space-available basis for applicants who meet all other admission requirements. Applicants who have missed the deadline should consult with the graduate coordinator for that program to receive advice regarding the possibility of enrolling as a nondegree student for a maximum of six credits while awaiting action on their application.

Students interested in receiving a graduate assistantship should apply to the Office of Graduate Studies no later than February 15.

Notification of Admission

All applications are reviewed by both the appropriate department or program and the dean of graduate studies.

The dean will notify applicants of the acceptance or rejection of their applications. If accepted, students must follow all program advising and scheduling policies and procedures. Accepted students should meet immediately with their advisers to outline a program of study.

Matriculation Fee

At the time of acceptance into a graduate program at West Chester University, the student must submit a nonrefundable fee of \$100 to reserve his/her admission. This sum is applied toward the student's tuition and/or fees but is nonrefundable should the student subsequently decide not to attend West Chester University. The student's admission is canceled if he/she fails to submit the \$100 matriculation fee by the due date.

Registration

All active graduate students (those who have maintained continuous enrollment), nondegree students who have attended within the past year, and newly accepted students will receive scheduling materials and registration instructions by mail. Materials for summer and fall semesters are usually avail-

able in early April, and for spring semester in early November. Students who anticipate receiving materials but do not receive them should contact the Office of Graduate Studies.

Active Status

See policy on Continuous Enrollment.

Continuous Enrollment

All graduate students who have been admitted into a degree program must maintain continuous registration each semester (except summer sessions), or must apply for a formal leave of absence. Graduate students who do not wish to register for formal course work, but who desire to maintain continuous enrollment, must register for GSR799, a noncredit registration category used to record the fact of continuous enrollment. Graduate students are not required to maintain matriculation during the summer sessions unless they intend to complete their final degree requirements during this period.

With the approval of the graduate coordinator and the dean of graduate studies, a leave of absence may be granted for a minimum of one calendar year. Leave of absence forms may be obtained from the Office of Graduate Studies. A leave of absence does not extend the six-year time limit for completion of all degree requirements.

Unless a graduate student maintains continuous enrollment or is granted a leave of absence, he or she is ineligible to return until readmitted. A formal application for readmission must be completed and submitted to the Office of Graduate Studies. Readmission is not automatic and may be subject to additional conditions set by the department, school or college, or by the graduate dean.

Admission Requirements for Degree Students

1. A baccalaureate degree from a college or university accredited in the United States or its equivalent from a school in another country.

- 2. A cumulative average of at least 2.50 and a GPA of at least 2.75 in the major discipline. (An "A" equals 4.0.)
- 3. Scores from the Graduate Management Admission Test, Graduate Record Examination, or the Miller Analogies Test if these are required for admission to the program in which the student wishes to enroll.
- 4. Approval by the department offering the desired degree program. Before such approval is given, an interview with a faculty member may be required. The applicant also must meet any other additional requirements established for the degree program, including grade point averages which exceed the minimum graduate admission requirements.
- 5. Approval by the dean of graduate studies and sponsored research.
- 6. Space available in the program.

An applicant who has academic deficiencies may be granted provisional status. The departmental graduate coordinator will specify course work which must be taken to remove such deficiencies and which will not be credited to degree requirements including, if necessary, undergraduate prerequisites. Admission to degree study does not constitute admission to degree candidacy. After a student has satisfactorily fulfilled certain course requirements specified in the degree program and has completed 12 to 15 semester hours of work, the student must apply for admission to degree candidacy.

Graduate Record Examination and Graduate Management Admission Test

Scores from the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) are required for many degree programs. The prospective degree student should consult the appropriate program outline and schedule a test prior to matriculation.

Both tests are administered by the Educational Testing Service, P.O. Box 6004, Princeton, NJ 08541-6004. For current information regarding application materials and test dates, contact the Counseling Center, 610-436-2301. Application forms must be filed with the Educational Testing Service at least

15 days prior to the date of any examination.

The examinations may be taken at any of the testing centers designated by the Educational Testing Service. The GRE is administered periodically at West Chester—generally in October, December, February, April, and June. West Chester University became a test center for the GMAT in fall 1989.

Miller Analogies Test

Some degree programs require students to take the Miller Analogies Test, which is administered each week at the Counseling Center, Room 129, Lawrence Center. It requires less than two hours and is given by appointment. Students requiring the test should telephone the center (610-436-2301) well in advance to schedule a test date. Appointments are often booked several months in advance. The student must pay an examination fee in person at the time the test is taken at the Counseling Center.

Undergraduates

An undergraduate who has completed 96 credits of undergraduate course work, is in the final semester of work for the bachelor's degree, and has an overall grade point average of at least 3.0 may, with the permission of the dean of graduate studies and sponsored research, enroll in up to six credits of graduate-level courses. Credits earned may be applied to a master's degree program subject to the approval of the major department.

Auditors

An auditor is a student who attends classes but does not necessarily do other work required of students in the course. Anyone may attend the University for the sole purpose of auditing one or more graduate courses by obtaining approval from the course instructor, graduate coordinator, and dean of graduate studies and sponsored research, and paying the regular fee. Full-time graduate students may audit one course per semester without charge, provided they obtain approval from the course instructor and the course does not create an overload for the student. If an overload results, students must pay for each credit in excess of 12. Part-time graduate students may audit one course per semester, provided they obtain the instructor's approval,

enroll in the course through the office of graduate studies, and pay the regular course fee.

Credit is never given to auditors. After the course has commenced, the auditor status may not be changed. The grade of Audit (AU) is recorded on the student's transcript. A full-time graduate assistant may not use an audit to maintain his/her full-time status without the prior approval of the appropriate adviser, graduate coordinator, and dean of graduate studies.

Transfer of Credit

Applicants to a degree program at West Chester who have earned credits through previous graduate study at another college or university may transfer credit under certain circumstances. Application forms for transfer of credit may be obtained in the Office of Graduate Studies and Sponsored Research. The following conditions are the minimum requirements for acceptance of transfer credit:

- 1. The credits must have been earned at an accredited graduate school.
- 2. The courses taken must be approved by the department or program in which the applicant intends to enroll at West Chester and by the graduate dean.
- 3. No more than six credits may be transferred.
- 4. The grade earned for courses to be transferred must be B or better. (An "A" equals 4.0.)
- 5. An official transcript must be submitted. Transcripts must be sent directly to the Office of Graduate Studies and Sponsored Research by the institution that granted the credits, and they must clearly indicate that the courses to be transferred are graduate courses, which were given graduate credit.
- 6. The courses for transfer must have been taken recently enough to fall within the six-year time limitation.

The Senior Citizen Policy

The Senior Citizen Program allows retired Pennsylvania residents to attend West Chester University tuition free on a SPACE-AVAILABLE BASIS. To qualify, the student must be retired, at least 60 years old, and have been a Pennsylvania resident for at least a year. Students may enroll as either degree or

nondegree students and may audit or take courses for credit. The program does not include internships, independent study, individualized instruction, student teaching, thesis, seminar, or any similar course requiring extra faculty compensation for the additional enrollment. All scheduling information is available in the University College.

Senior citizen students may not register prior to the beginning of classes. They must attend the first meeting of the class(es) for which they wish to register and obtain the instructor's signature on their schedule, indicating there is space available in the class. They then return their signed schedule, along with a signed Senior Citizen fee waiver form and signed audit form if they wish to audit, to the University College. The University College then schedules the student and submits the fee waiver form to the Office of Financial Aid.

Admission of International Students

Students from foreign countries may be admitted to the graduate program, provided they meet certain special requirements in addition to the University and program admission requirements. International students, like other out-of-state students, are accepted only when space is available.

Applications and supporting documents must be submitted to the Office of Graduate Studies and Sponsored Research no later than January 15 for admission the following fall semester, and September 15 for admission the following spring semester.

Applicants whose native language is not English must submit evidence of satisfactory performance on the Test of English as a Foreign Language (TOEFL) to the Office of Graduate Studies and Sponsored Research before application forms can be processed. A score of 550 is the minimum acceptable score, although some programs have higher minimum requirements. Information about the TOEFL test, including test dates and locations in foreign countries, can be obtained from the Educational Testing Service, Box

6151, Princeton, NJ 08541-6151, U.S.A. Registration forms must reach Princeton at least five weeks before the test is to be taken.

Applicants who fail to achieve a minimum score of 550 on the TOEFL may be admitted to the English as a Second Language (ESL) program, providing they are otherwise eligible for admission to the degree program to which they have applied. Successful completion of the ESL program will qualify the applicant for subsequent admission to the degree program.

The following information and documents must be filed with the Office of Graduate Studies and Sponsored Research:

- I. A completed application form.
- 2. An official copy of school certificates, showing the date issued for all work done beyond the elementary level
- 3. Official record of the TOEFL score sent directly to the Office of Graduate Studies by the Educational Testing Service.
- 4. A statement from a bank or other financial institution certifying ample financial resources to maintain oneself while a student in the United States. Current costs are \$12,000 for the academic year. (Summer and holidays are not figured into these costs.)
- 5. A Medical History Form and an Immunization Record must be completed by a physician and returned to the Office of Graduate Studies.
- 6. If a student is admitted to a degree program, a U.S. Immigration (I-20) Form will be supplied by the University.

After the application and supporting documents have been reviewed, the Office of Graduate Studies and Sponsored Research will notify the applicant of its action. International students are urged to remain in their own countries until they receive notice of acceptance. The University cannot assume responsibility for the housing or welfare of international students.

Acceptance Deposit for International Students

A \$12,000 deposit is required of all international students if West Chester University is issuing the initial student I-20 for the applicant. The deposit amount is based on estimated expenses for one academic year. After the student has paid all tuition and fees for the first semester (and living expenses if residing on campus), the balance of the first \$6.000 will be returned to the student. After these costs have been paid for the second semester, the remainder of the deposit will be returned to the student. All deposit amounts will be reduced by an amount equal to awarded scholarships, assistantships, or documented support from a foundation, other agency, or local U.S. resident sponsor.

If an international student has been in the United States on a student visa for at least nine months and attending school on a full-time basis, the deposit amount can be reduced at the discretion of the Office of Graduate Studies.

Insurance Requirements for International Students

International students at West Chester University are required to carry adequate health and accident insurance. Insurance must be effective for all periods of time the student has been authorized to be in the United States by an immigration document issued by West Chester University.

Health and accident insurance policies must be purchased through a company that sells insurance in the United States. West Chester University has set minimum coverage standards which must be met by all insurance policies. Information about the minimum standards is available at the Center for International Programs Office, 610-436-3515.

To assure compliance with the insurance requirement, all international students must come to the Center for International Programs by September 15 of each academic year (January 31 for students entering spring semester). There students may obtain information as to the amount of insurance required and the means of obtaining coverage to meet the insurance requirement.

Good Standing, Academic Probation, Degree Candidacy, and Degree Requirements

Good Standing

Students must maintain a 3.00 cumulative average to remain in good standing.

Academic Probation

Graduate students whose cumulative grade point average falls below 3.00 will be placed on academic probation. Graduate students must return to good standing during the next nine credits of appropriate graduate work, or they will be dropped from the program. Graduate students earning a cumulative GPA of 2.0 or lower will be dropped from the program without a probationary period. Grades earned during summer sessions count the same as grades earned during the academic year. All grades recorded determine the student's academic status. even if a student changes degree programs. Students dropped from a graduate program due to unsatisfactory work will not be permitted to take courses for credit towards a graduate degree in that department beyond the semester in which they are dropped.

Individual programs may have higher GPA minimums or additional requirements. To be eligible to receive the master's degree, graduate students must complete all requisite courses and credits with a cumulative GPA of at least 3.00.

Students holding graduate assistantships who fail to maintain a 3.00 cumulative GPA will have their assistantships revoked or will not have them renewed. This policy includes courses taken during summer sessions. Departments also may stipulate higher academic standards for maintaining assistantships.

Requirements for Admission to Degree Candidacy

Application for degree candidacy must be made immediately on completion of the first 12 to 15 semester hours of course work in a degree program.

During the precandidacy period the student must:

- 1. Complete those courses which the department or program specifies as prerequisite to degree candidacy.
- 2. Perform satisfactorily on examinations which the department or program may require for admission to degree candidacy.
- 3. Maintain a cumulative average of at least 3.00.
- 4. Meet specific GPA requirements as stipulated by the individual degree program.

Procedure for Application to Degree Candidacy

- 1. Every student must file an application for admission to degree candidacy with the dean of graduate studies and sponsored research. Forms are available in the Office of Graduate Studies and Sponsored Research.
- 2. When the application has been evaluated by the department concerned and by the dean of graduate studies and sponsored research, the graduate dean will send a letter of acceptance or rejection to the student.
- 3. Upon notice of acceptance, degree candidates must confer with their advisers to continue with their previously established program of study.

Students must be admitted to degree candidacy prior to registering for comprehensive exams and before registering for thesis credits.

Reapplication for Degree Candidacy

Applicants who fail to qualify as degree candidates may reapply. They must maintain a cumulative grade point average of 3.00.

Summary of Requirements for the Master's Degree

- 1. Admission to degree candidacy.
- 2. Completion of all requisite courses

- and credits with a cumulative average of 3.00, compliance with specific GPA requirements as stipulated by the individual degree program, and achievement of satisfactory scores on the Graduate Management Admission Test, Graduate Record Examination, or the Miller Analogies Test, if required. (See program requirements.)
- 3. Satisfactory performance on a final written and/or oral comprehensive examination conducted by the student's advisory committee in the field of specialization. (It is the candidate's responsibility to apply for this examination.)
- 4. Submission and approval of the thesis or research report in those programs requiring it.
- 5. Fulfillment of any special examinations, requirements, or competencies that are unique to a department or program.
- Fulfillment of all financial obligations to the University, including payment of the graduation fee, and of all other obligations, including the return of University property.
- 7. Compliance with all academic requests from the dean of graduate studies and sponsored research, including submission of a form letter of intent to graduate by the specified due date.

Additional Requirements for the Master of Education Degree

In addition to fulfilling these requirements, candidates for certain Master of Education degrees must give evidence of successful teaching experience approved by the department chairperson. Other experiences in lieu of this requirement must be approved by the relevant department and the dean of graduate studies and sponsored research.

Fees and Expenses

Special Note: The fees listed below reflect charges at press time. For up-to-date information on fees at any given time, contact the Office of the Bursar, 610-436-2552.

Fees and expenses are subject to change without notice. Fees shown here are in effect for the 1994–95 academic year. Changes for 1995–96, if approved, would occur after the printing of this catalog.

Unless otherwise specified, fees may be paid by Visa, MasterCard, check, or money order made payable to West Chester University. The cancelled check, money order record, or charge card billing serves as a receipt.

Basic Graduate Fees for Legal Residents of Pennsylvania

Less than 9 credits—\$171.00 per semester hour of credit

9 through 15 credits—\$1,5+3.00 per semester

More than 15 credits—\$1,543.00 plus \$171.00 for each semester hour of credit beyond 15

Basic Graduate Fees for Out-of-State Students

Less than 9 credits—\$308.00 per semester hour of credit

9 through 15 credits—\$2,772.00 per semester

More than 15 credits—\$2,772.00 plus \$308.00 for each semester hour of credit beyond 15

Housing Fee

Graduate student housing is limited at West Chester University. If housing is granted, a fee must be paid which will secure the occupancy offered. Possible options include a standard double room in a designated section of an undergraduate residence hall with one roommate, or in selected units of the South Campus apartment complex with five occupants in combinations of doubles and singles. This fee covers all utilities, including on-campus and local telephone service (students must provide the actual telephone). The University offers a special program for longdistance calling. The Student Occupancy

Agreement, which must be signed before students check into their rooms, is binding for the full academic year (September–May), even for those students who may receive late room assignments. The current cost per student is \$1,290 a semester for a traditional residence hall; apartments are \$1,450 for a double bedroom and \$1,625 for a single bedroom. These rates are subject to change and should be considered reasonable approximations.

Food Plans

Plan 1 (\$764)—14-Variable Program entitles students to any 14 of the 19 meals served Monday through Sunday and includes a flexible fund of \$100. This program is required for residents in the traditional residence halls and is available to South Campus apartment residents as well as off-campus and commuter students.

Plan 2—Flexible-Fund Program is designed for any student not living in the traditional residence halls, as well as faculty and staff. A minimum of \$100 can be placed into a flexible fund account that can be accessed by an ID card in the Lawrence Food Court, Campus Corner or Convenience Store, or in the Sykes Ram's Head Deli. Faculty and staff may use their flex dollars in the University Club as well. With this program, there is no need to carry cash to purchase meals. The flexible fund can be increased in \$25 increments at any time during the semester.

Plan 3 (\$652)—10-Variable Program is available to any student not living in the traditional residence halls. It entitles participants to 10 out of the 19 meals served Monday through Sunday and includes a flexible fund of \$50 that may be used as described in Plan 2.

Plan 4 (\$473)—5-Variable Program is similar to Plan 3 and entitles participants to 5 out of the 19 meals served Monday through Sunday and includes a flexible fund of \$50.

All flexible fund dollars (regardless of meal plan) must be used by the end of the spring semester.

Any flexible funds remaining at the end of the second semester will be forfeited. The meal week runs from Monday to Sunday; any unused meals at the end of any week will be forfeited.

Students in traditional residence halls already have their meal plan cost included in their University billing. All other students (South Campus apartment residents, and off-campus and commuter students) can sign up for a meal plan by applying at the Office of the Bursar in Elsie O. Bull Center.

Late Registration Fee

Graduate students are not automatically granted permission to schedule after the deadline; however, a late registration fee of \$35 is required of students who receive approval to schedule and pay after the official registration deadline.

Community Center Fee

Students pay a mandatory community center fee based on the number of credits carried, as follows:

1 through 6 credits \$ 5.00 per semester 7 through 8 credits \$10.00 per semester 9 credits or more \$20.00 per semester

The community center fee is **not** refundable.

Student Union Expansion Fee

Students pay a mandatory student union expansion fee as follows:

Full Time Part Time Summer \$55.00 \$20.00 \$10.00

Educational Services Fee

The educational services fee is a mandatory charge for all students. The fee is charged in lieu of specific department charges.

Full time (9 credits or more) \$100.00 per semester Part time \$40.00 per semester

Health Center Fee

All full-time students (nine credits or more) are charged a mandatory \$40 health center fee per semester. Part-time students pay \$16 per semester.

Regular summer session students pay \$6 and pre and post summer sessions pay \$4.

International Student Services Fee

International students are assessed a \$25 per semester fee to cover services provided by the Center for International Programs.

Graduate Student Association Fee

\$6.00 per semester full time \$3.00 per semester part time

Course Audit Fee

Students who audit a course (attend a course without taking credit) pay the same fees as other students.

Financial Obligations

Students are expected to make full payment of fees by the registration deadline in advance of each semester. The University sends bills for fees preceding each semester. If payment is not made within the stipulated period, the student risks cancellation of all scheduled courses.

Payments normally fall due each academic year as follows:

Fall semester Spring semester Mid-August Mid-December

Any change in these dates will be shown on fall or spring invoices. Checks should be made payable to West Chester University and mailed to:

> Office of the Bursar Elsie O. Bull Center West Chester University West Chester, PA 19383

No student will be enrolled, graduated, or given a transcript of his or her record until all charges due at the particular time are paid.

Deferred Payment Policy

The University extends deferred payment privileges to all students who are in good financial standing and have not defaulted on a previous payment plan. The fee charged for this service is \$50 annually. For more information about the plan offered, contact the Office of the Bursar at 610-436-2552.

Billing Address Changes

If a student's billing address changes during enrollment at the University, the new address must be given to the Office of the Registrar in the Elsie O. Bull Center to avoid delayed delivery of bills.

Dishonored Check Fee

A fee of \$25 is charged to accounts for checks returned for any reason.

Transcript Fee

The fee for transcripts is \$3 per copy. Transcript request forms are available in the Office of the Registrar. Immediate transcripts are \$5 per request.

Music Instrument Rental Fees

Each student renting a musical instrument for a semester is charged \$20 per instrument. Every student using a pipe organ for practice for one period each weekday is charged \$36 per semester.

Withdrawal Procedure

Students who wish to withdraw from the University after paying their semester or summer session fees must follow the official withdrawal procedure. Withdrawal forms are available in the Office of the Registrar, Elsie O. Bull Center. Completed forms must be returned to that office during the semester or summer session when the withdrawal occurs.

Basic Fee Refund Policy

Refunds cannot be made unless the student officially processes the withdrawal from the University or the drop from a course through the Office of the Registrar. Application fees credited to the student's basic fee are not refundable. Other amounts paid and credited toward the basic tuition fee are refundable in full for students who withdraw for approved reasons (such as documented ill health or personal tragedy) prior to the first day of the semester.

Beginning with the first class day of the semester, the basic tuition fee exclusive of the acceptance fee is refundable for students who withdraw in accordance with the following schedule:

1st or 2nd week 80%
3rd week 70%
4th week 60%
5th week 50%
6th week and thereafter NO REFUND

Students who are in their first semester at WCU and who have received federal financial aid will receive prorated refunds based on federally mandated requirements.

Students who officially reduce their credit hour load to qualify for a lower basic tuition fee shall receive a refund of a percentage of the difference in accordance with the above schedule.

Refunds will not be made to students who are temporarily or indefinitely suspended.

Housing Refunds

The \$100 room deposit is not refundable. When students change from resident status to commuter status after the beginning of the semester, there is no room refund, except for the most compelling reasons and when a "Request for Cancellation of Occupancy Agreement" is properly filed in the Office of Housing and Residence Life.

Meal Refunds

The fee for meals may be refunded on a weekly prorated basis. Contact the Office of the Bursar in the Elsie O. Bull Center.

Application Fee

A nonrefundable graduate student application fee of \$25 is assessed to all students applying to the graduate program.

Commencement Fee

The University charges \$45 to all students enrolled in a degree program who will have fulfilled their degree requirements by the end of the semester. The fee is payable to the Office of the Bursar and should accompany a graduation application form from the Office of Graduate Studies and Sponsored Research.

Parking Fee

The University charges a nonrefundable parking fee to students who are eligible to purchase a decal to use University parking lots. The current parking fee is \$20 per year; however, the fee effective fall 1995 has not yet been established.

Registration forms are available at the Department of Public Safety. A violation of University parking regulations is charged at \$5 per issued ticket.

Library Card/ID Card

In order to borrow books from the library, graduate students must present their ID (identification) card. An ID card can be purchased for a \$2 fee at the SSI Office, Sykes Union Building.

Academic Computing Center ID Card

In order to borrow software and/or use the Academic Computing Center facilities, all graduate students (part-time and full-time students) must present a valid WCU ID card. The ID card is purchased at the SSI Office, Sykes Union Building. (For further information on the cost and hours for pictures, contact SSI at 610-436-2955.)

Fees for Crossover Registration

Students who are admitted to graduate study and need to take undergraduate course work to correct academic deficiencies are advised to enroll in undergraduate courses exclusively, and they will be billed undergraduate fees. Graduate students who are enrolled in graduate and undergraduate courses during the same semester will pay grad-

uate fees for all course work. Further, all such courses or combinations are to appear on a single graduate transcript that includes a code or legend which differentiates between undergraduate and graduate courses. Undergraduate courses appearing on a graduate transcript may or may not be acceptable for a degree program, according to determinations made by the degree-granting department. Undergraduate students with at least a 3.00 GPA and 96 credits of course work may take up to six credits of graduate course work in their final semester in accordance with University policy. If the student wishes to have the credits count towards the bachelor's degree, he/she must submit a completed "Application for an Undergraduate Student to Take a Graduate Course for Undergraduate Credit." If the student wishes to have the credits count towards a graduate

degree, he/she must submit a completed "Application for an Undergraduate Student to Take a Graduate Course for Graduate Credit." Both forms are available in the Office of the Registrar. To receive graduate-level credit, the student also must submit a properly completed and approved Graduate School Application for Admission form to the Office of Graduate Studies before completing the appropriate form.

If a course is taken for undergraduate credit by an undergraduate student, no additional fees will be required. If a course is taken for graduate credit, the student must pay graduate tuition and applicable fees for that course. Credit earned and grades received will be recorded on the undergraduate transcript. Credits so earned may later be applied to a graduate program, subject to approval of the major department.

Financial Aid

The purpose of financial aid at West Chester University is to provide financial assistance and counseling to students who can benefit from further education, but who cannot obtain it without such assistance. Financial assistance consists of gift aid in the form of scholarships or grants and self-help aid in the form of employment or loans. The main responsibility for meeting educational expenses rests with students and their families. Financial aid is a supplement to family contributions and is to be used for educational expenses.

Eligibility for financial aid, with the exception of some assistantships and scholarships, is based on demonstrated financial need. Family income, assets, and family size influence the demonstrated financial need of the student.

All documents, correspondence, and conversations among the aid applicant, his or her family, and the Office of Financial Aid are confidential and entitled to the protection ordinarily arising from a counseling relationship.

In order to receive need-based financial aid, the student must:

- 1. Meet enrollment requirements for the specific aid program and must be making satisfactory academic progress. See the Office of Financial Aid for a more detailed explanation of this requirement.
- 2. Submit a Free Application for Federal Student Aid to the Pennsylvania Higher Education Assistance Agency in Harrisburg, Pa., before March 1 for priority consideration. All students, regardless of state residency status, must complete this form in order to be considered for financial aid at

- West Chester University. This application will be used to determine demonstrated financial need for the student. All students are encouraged to complete this application.
- 3. Submit a Financial Aid Transcript from all previously attended post-secondary educational institutions including all undergraduate institutions. This transcript may be obtained through the Office of Financial Aid. Submit this transcript even if no aid was received at those institutions.
- 4. Submit any other requested documentation concerning financial and family circumstances that may be requested by the Office of Financial Aid, or any agency that administers financial assistance programs. Financial aid applicants may be required to submit copies of their parents' I.R.S. forms or various other income documents.

The submission of the information described above does not automatically entitle a student to receive financial aid. The Office of Financial Aid follows the regulations established by the federal government in awarding aid. Aid applicants are ranked according to unmet need (based on budget, federal and state grants, and expected family contribution), and available funds are offered to the neediest students first. Students must apply for financial aid each academic year.

Direct questions concerning financial aid to the Office of Financial Aid, 138 Elsie O. Bull Center, West Chester University, West Chester, PA 19383, 610-436-2627. Office hours are Monday through Friday, from 8:30 a.m. to 4 p.m.

Withdrawal/Enrollment Change and Aid

Students who officially withdraw or change their enrollment status may be entitled to a refund of certain fees, in accordance with University policy. (See section entitled "Fees and Expenses.") If the student has been awarded financial aid for the semester in which the withdrawal or enrollment change occurs, a portion of the refund will be returned to financial aid program funds. Financial aid refunds due to withdrawals or enrollment changes are processed in accordance with federal, state, and awarding agency guidelines and regulations. A student considering withdrawal or an enrollment status change should consult the Office of Financial Aid to determine the impact of that action on current and future financial aid.

Student Consumer Rights and Responsibilities

You have the right to ask a school:

- 1. The names of its accrediting organizations.
- 2. About its programs; its instructional, laboratory, and other physical facilities; and its faculty.
- 3. The cost of attendance and its policies on refunds to students who drop out.
- 4. What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
- 5. What the procedures and deadlines are for submitting applications for each available financial aid program.
- 6. What criteria it uses to select financial aid recipients.
- 7. How it determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc., are considered in your budget. It also includes what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need.
- 8. If you have a loan, you have the right to know what the interest rate is, the total amount that must be repaid, the length of time you have to repay the loan, when you must start repaying it, and any cancellation and deferment provisions that apply.
- 9. If you are offered a work study job, you have the right to know what kind of job it is, what hours you must work, what your duties will be, what the rate

- of pay will be, and how and when you will be paid.
- 10. To reconsider your aid package, if you believe a mistake has been made.
- How the school determines whether you are making satisfactory academic progress and what happens if you are not.
- 12. What special facilities and services are available to the disabled.

You have the responsibility to:

- Review and consider all information about a school's program before you enroll.
- Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the right place. Errors can delay your receipt of financial aid.
- 3. Provide all additional documentation, verification, corrections, and/or new information requested by either the Office of Financial Aid or the agency to which you submitted your application.
- Read and understand all forms that you are asked to sign and keep copies of them.
- 5. Accept responsibility for the promissory note and all other agreements that you sign.
- If you have a loan, notify the lender of changes in your name, address, or enrollment status.
- 7. Perform in a satisfactory manner the work that is agreed upon in accepting a college work study job.
- 8. Know and comply with the deadlines for application for aid.
- Know and comply with your school's refund procedures.

Federal Perkins Loan Program

The Federal Perkins Loan Program is a cooperative effort of the federal government and West Chester University which enables qualified students to secure educational loans under attractive conditions. Each borrower must:

- Be enrolled or accepted in the institution participating in the program.
- 2. Demonstrate financial need.
- 3. Maintain satisfactory academic progress in the curriculum.

The combined total of undergraduate and graduate loans cannot exceed \$30,000. Approval of loans depends on the student's financial need and the availability of loan funds. The Free Application for Federal Student Aid must be filed. For further information contact the director of financial aid.

Federal Stafford Loan

The Federal Stafford Loan is a cooperative effort of private lending institutions and the state and federal governments which enables qualified students to secure long-term educational loans.

To be eligible for a loan, a student must:

- Be accepted for enrollment in an approved institution or, if enrolled, be making satisfactory academic progress.
- 2. Be classified as at least a half-time student.

The maximum loan per academic year for graduate students is \$18,500 (combined subsidized and unsubsidized) or the cost of the education, whichever is less; no more than \$8,500 of this total loan amount may be subsidized. The total maximum indebtedness for all years of undergraduate and graduate study is \$65,500 subsidized and \$73,000 unsubsidized. Applications for this loan can be obtained at lending institutions (banks).

Graduate Assistantships

A limited number of graduate assistantships are available to qualified, full-time and part-time graduate students. Interested students should consult their department chairperson or graduate coordinator and the Office of Graduate Studies and Sponsored Research to determine the availability of assistantships and their own eligibility. To be eligible, applicants must be admitted as fully matriculated students into a graduate degree program. Certification programs are not degree-granting programs and, accordingly, certification students are not eligible for graduate assistantships. Assistantship applicants also must have an undergraduate GPA of 2.75 and/or a graduate GPA of 3.00. Assignments are made by the department in which the assistantship is located and may involve part-time undergraduate teaching, participation in research projects, or other professional duties under faculty supervision. Applications are available in the Office of Graduate Studies and Sponsored Research.

Full-time graduate assistants, in return for 20 hours of assigned duties per week, receive tuition remission and a stipend of \$5,000 for the academic year. Half-time assistantships involving 10 hours per week of assignments also are available that cover six credits of tuition remission and pay a stipend of \$2,500 for the academic year. Full-time graduate assistants are not allowed to hold other on-campus employment simultaneously. Part-time graduate assistants may work on-campus a maximum of ten hours per week in addition to holding an assistantship.

For maximum consideration for support, applications for the fall semester should be submitted by February 15, although some departments occasionally consider assistant-ship applications at later dates. Assistant-ships also are offered by the Center for Academic Excellence, Residence Life and Housing, the Academic Computing Center, and other offices. Please contact these offices, the adviser and/or graduate coordinator of your academic program, or the Office of Graduate Studies for additional information.

Students holding graduate assistantships who fail to maintain good academic standing (minimum GPA of 3.0) will have their assistantships revoked or will not have them renewed. This policy includes courses taken during summer sessions. Departments also may stipulate higher academic standards for maintaining assistantships. Full-time graduate assistantships are given for a maximum of four semesters. Half-time assistantships may be granted for up to eight semesters.

Frederick Douglass Graduate Assistantships

These graduate assistantships are named after Frederick Douglass, a great nineteenth century American abolitionist, writer, and statesman who, at the time of his death in 1895, was indisputably the most famous black American of his time. The assistantships are offered to the academically qualified black American, native American, and Hispanic American graduate students. These are full-time (20 hours per week) assistantships that provide a tuition waiver and \$5,000 stipend for the academic year. The awards are made on an annual basis and are renewable for a second year. Students may use these assistantships to pursue a master's degree in one of the University's graduate programs. Interested individuals with excellent credentials should contact the Office of Graduate Studies and Sponsored Research, 102 Old Library*, 610-436-2943.

Residence Hall Graduate Assistants

Opportunities to serve as residence hall graduate assistants are open to all full-time graduate students. Graduate assistants live in the University residence halls and assist the full-time, professional resident director in providing direction for the personal, social, and educational development of the resident students. Residence life graduate assistants are also supervisors for student workers and serve as University judicial hearing officers. These positions are full-time (25 hours a week) graduate assist-

antships that offer a stipend, tuition remission, and room and meal plan. Preference is given to students enrolled in a counseling or psychology program and to those with prior residence hall living experience. Applications may be made through the Office of Residence Life and Housing, Sykes Student Union Building, 610-436-3307.

Institute for Women Graduate Grant

The Institute for Women at West Chester University offers an annual grant of \$500 to a woman graduate student who is accepted into a master's degree program at West Chester University. The award is based on high academic achievement; evidence of potential for contribution to the applicant's field of study; a record of leadership in school, community, church, or other setting; and evidence of service to others. Applications, including reference forms, are available from the Office of Graduate Studies and Sponsored Research. Completed materials must be submitted by March 15. Only students who have filed all required admission credentials and plan to enroll for a minimum of six graduate credits are eligible.

Federal Work Study

Graduate students may apply through the Office of Financial Aid for University or federal work study funds. The Free Application for Federal Student Aid also must be filed.

Kinesiology (Physical Education) Department Scholarship

One \$300 scholarship is awarded to a graduate student in kinesiology. Applications should be submitted to the chairperson, Department of Kinesiology.

Special Education Department Scholarship

The Department of Special Education offers a scholarship of \$500 to be awarded annually to a select, nontraditional student. The award is made possible through the Military Order of the Purple Heart, a veterans' organization chartered by Congress for armed forces personnel wounded in combat.

Notification of the award will be made by March 1 of each year. Applications and further information are available from the chairperson, Department of Special Education.

Professor Russell Sturzebecker Scholarship

The Professor Russell Sturzebecker Scholarship is a \$100 award made each semester to a "worthy and needy" graduate student in health and physical education. Through the generosity of Mr. John Unruh, the award is donated in honor of Professor Sturzebecker.

The recipient must be working full time in the field of health and physical education and must be a part-time student at West Chester University working towards a master's degree in his or her professional field.

Graduate students who meet the criteria are invited to submit a letter of application for the scholarship along with a resumé of their professional and academic status. These documents should be submitted to the chairperson of the Department of Kinesiology before November 15 for the first semester, and before March 15 for the second semester. Selections will be made by a committee of three graduate faculty members of the Department of Health and the Department of Kinesiology.

Application forms are available from the Department of Kinesiology.

Grace Cochran Research on Women Award

An annual \$100 award in each division, graduate and undergraduate, is given for the best research on women. The award, sponsored by the Institute for Women, is given on Research on Women Day held in the spring of each year. Dr. Cochran, an eminent teacher and scholar, graduated from the West Chester Normal School in 1906.

Dr. Charles S. Swope Scholarship Foundation

The Memorial Scholarship Trust Foundation was established by Charles E. Swope and Richard M. Swope in memory of Dr. and Mrs. Charles S. Swope. Dr. Swope served as president of West Chester University for a quarter of a century. Applicants must be enrolled full time and be graduates of West Chester University. Scholarships are \$1,000 each. Applications must be filed on or before April 1. Selection is made during May, with scholarships commencing in September.

Charles Mayo Scholarship

A financial grant is awarded yearly to an upperclass or graduate student in political science in memory of Charles Mayo, former president of West Chester University. Funded by contributions, the award is administered by faculty of the Department of Political Science. The value of the scholarship is approximately \$200.

^{*}Effective fall semester 1995, 102 Rosedale Ave.

Academic Information and Regulations

Time to Complete the Degree Program

All requirements for the degree, including courses, comprehensive examinations, and thesis, must be completed within the six years immediately prior to the expected date of graduation.

See also "Degree Candidacy" and "Degree Requirements."

Classification of Students

Students are classified as:

A. Matriculated Students

- 1. Full matriculation, granted to a student who meets all admission requirements.
- 2. Provisional matriculation, which may be granted to a student who:
 - a. Has not taken the Graduate Record Examination, the Miller Analogies Test, or a specialized entrance examination required by the department concerned.
 - b. Is unable to present all prerequisites required by the department.

Students must fulfill the conditions stipulated in their provisional acceptance by the time that application to degree candidacy is made. Credit earned as a provisional degree student may be accepted towards the degree only on recommendation of the student's adviser.

Note: Some programs do not grant provisional matriculation.

- 3. Teacher certification, which applies to students taking course work to gain teacher certification.
- 4. *Professional growth*, for students who take graduate course work but seek neither a degree nor certification.

B. Nondegree Students

A nondegree student may be admitted to take a workshop or other credit-bearing class. Nondegree students may schedule up to six credits of course work on a nonmatriculated basis. Additional course work may be taken only after the student has applied and been accepted as a matriculated student into one of the categories described above. Students taking only special courses, such as workshops, are the exception to this rule.

Courses taken under nondegree status may not necessarily be applied to degree programs at a later date. Students should begin the formal application process immediately after they have decided to pursue a graduate degree at West Chester University.

Advisory System

All students will be assigned an adviser in the department of their chosen major. Students must comply with all program or department advising and scheduling procedures, and are expected to meet with their advisers at least once each semester during the course scheduling period.

Graduate Level Course Numbering System

- 500 Series graduate level courses to which advanced undergraduates may be admitted
- 600 Series graduate courses not normally open to undergraduates

Course numbering within a series is at the discretion of the department offering the courses.

Undergraduate Courses for Graduate Credit

Some departments have identified selected undergraduate courses that may be taken by graduate students (under departmental advisement) for graduate credit. No more than six credits of specifically designated 400-level courses may be applied to the awarding of the graduate degree. See departmental listings.

Workshops

The number 598 following the departmental prefix indicates an "open" workshop that allows the departments to offer a variety of short-term seminars in specific subjects under this designation. Such workshops may or may not carry credit in a graduate degree program.

Student Load

The normal work load for a full-time student during the fall and spring semesters is nine semester hours. The load may be increased if approval has been obtained from the student's adviser.

During the summer session, the normal

work load is one semester hour of work for each week of enrollment. Generally, students carry only one course during the Pre or Post Session and no more than six credits during the Regular Session. Exceptions to this policy must be approved by the dean of graduate studies and sponsored research.

Course Credit by Examination

Credit by examination may not be taken for graduate course work.

Pass/Fail Grades

The pass/fail option is not available to graduate students for graduate or undergraduate courses.

Transferring Credit from Other Institutions

West Chester students who wish to take course work at other institutions for credit at West Chester University must first obtain approval from their chairperson or coordinator and the dean of graduate studies and sponsored research. Other restrictions and requirements are the same as those given in "Transfer of Credit," page 5.

Change of Status

A provisional degree student who has met the various conditions stipulated at the time of admission may petition for full graduate standing by submitting a written request to the Office of Graduate Studies and Sponsored Research. Credit earned as a provisional degree student or as a nondegree student may be accepted in a degree program only on the recommendation of the student's adviser. Provisional degree students should consult their advisers well in advance in order to select work appropriate for transfer toward the degree.

Changing to Auditor Status

Before the end of the add period, a student may apply to become an auditor by completing a Change in Class Status Form available in the Office of Graduate Studies and Sponsored Research and by obtaining the necessary approval.

Changes in Program

In order to change from one degree program to another, a student must submit an application to the Office of Graduate

Studies and Sponsored Research. The student must meet all specific admission requirements of the program for which the change is requested. No fee is charged.

Adding a Course

Students may add a course by filing a Schedule Change Form in the Office of the Registrar or the Office of Graduate Studies and Sponsored Research during the schedule change period and after obtaining approval from their program adviser or graduate coordinator, and the dean of graduate studies and sponsored research.

Dropping a Course

- A. During the first week of a semester, or the equivalent time in summer sessions, a student may drop a course, thereby receiving no grade, by filing a Schedule Change Form in the Office of the Registrar or the Office of Graduate Studies and Sponsored Research during the schedule change period.
- B. A grade of W will be entered on the academic record of any student who drops a course between the end of the first week and before the end of the fifth class week or the equivalent in summer sessions.

Students who drop a course between the end of the fifth class week and the end of the tenth class week will receive a grade of either Withdraw Passing (WP) or Withdraw Failing (WF) from the instructor, indicating that they were passing or failing the course at that time. A WP is not treated as a grade. A WF is computed as an "F." After the tenth week of classes, students will receive whatever grade the professor assigns (excluding WF and WP) but are not entitled to selectively withdraw from particular classes. STU-DENTS WHO FAIL TO OFFICIALLY DROP A COURSE FOR WHICH THEY HAVE REGISTERED WILL RECEIVE A GRADE OF "F" FOR THE COURSE.

However, students must be registered for at least one course, or they must withdraw from the University. See "Withdrawal from the University" below.

Withdrawal from Courses in Summer Sessions

Students wishing to withdraw from summer sessions should follow the same procedure for withdrawal from a course. Withdrawal deadlines are adjusted appropriately in accordance with the summer calendar.

Withdrawal from the University

Students wishing to withdraw from the University must go to the Office of the Registrar and follow the prescribed procedures. If illness or some other emergency interrupts the student's work, he or she must notify the Office of the Registrar immediately. Unless a student withdraws officially, F grades will be recorded for unfinished courses. The student also must notify the Office of Graduate Studies and Sponsored Research of his or her withdrawal from the University.

Leave of Absence

Students in a degree program who will not be registering for course work during the fall or spring semesters should file a request for a leave of absence with the dean of graduate studies. A leave of absence may be granted for a minimum of one calendar year. The request should be filed in advance of the semester in which course work is halted. Approved leaves of absence do not release the student from the six-year time limitation stipulated for the completion of degree requirements. Leave of absence request forms may be obtained from the Office of Graduate Studies.

Grading System

The following grading system applies to graduate students:

Grade Definitions:

	Quality	
Grade	Points	Interpretation
A	4.00	Superior graduate attainment
A-	3.67	
B+	3.33	Satisfactory graduate attainment
В	3.00	
B-	2.67	
C+	2.33	Attainment below graduate
С	2.00	expectations
C-	1.67	
D+	1.33	Credit not accepted toward
D	1.00	any graduate program (See course repeat policy for all grades below C-)
D-	0.67	
F	0	
		Failure
NG		No Grade
W		Withdrawal
WF	0	Withdrawal

Failing

WP	Withdrawal
	Passing
Y	Administrative
	Withdrawal
AU	Audit

I (Incomplete) is a temporary grade replaced by NG in 1980. NG (No Grade) is given when a student fails to complete course requirements by the end of a semester and a time extension is granted by the instructor; see "Removing 'No Grade' Designation" below.

W (Withdrawal) is given when a student withdraws from a course between the end of the first and the end of the fifth class week of the semester or the equivalent in summer sessions.

WP and WF are explained in the section "Dropping a Course."

Y (Administrative Withdrawal) is given under appeal when there are nonacademic mitigating circumstances, and there is documentation that the student never, in fact, attended class.

Course Repeat Policy

Graduate students must repeat courses applied to the degree for which they have received a grade of less than C-and all courses for which the program or department has a higher standard. Courses may be repeated only once. Both grades received for a course will remain on the student's record, and both grades will be used to calculate the cumulative and major averages.

Removing "No Grade" Designation

Students must complete courses for which they have received a No Grade (NG) by the completion date stipulated by the instructor, and no later than the end of the first nine weeks of the next semester or the NG will become an F. The nine-week requirement does not apply to independent study, thesis, research report, practicum, or recital credit.

Grade Change Policy

A grade awarded other than NG is final. Final grades can be changed only when there is a clerical or computational error. If the student thinks there is an error, the student must report the alleged error in writing to the professor as soon as possible, but no later than the end of the fifth week of the following semester. If a grade change is war-

ranted, the professor must submit a change of grade request to the Office of the Registrar not later than the end of the ninth week of the semester. Final grades cannot be changed after the ninth week of the semester following the alleged error.

Grade Reports

Grade reports are mailed to the student soon after the end of a semester or summer session. Students are reminded to check their reports against grade requirements and other regulations, as well as for accuracy, and to have their grade reports available when consulting with advisers.

Grade Appeals

Scope of the Policy

The Grade Appeals Policy applies only to questions of student evaluation. Since appeals involve questions of judgment, the Grade Appeals Board will not recommend that a grade be revised in the student's favor unless there is clear evidence that the original grade was based upon prejudiced or capricious judgment, or was inconsistent with official University policy. In the case where the grade was based on a charge of cheating, the Academic Dishonesty Policy applies (see below). Academic Dishonesty includes but is not limited to:

- Plagiarism, that is, copying another's work or portions thereof and/or using ideas and concepts of another and presenting them as one's own without giving proper credit to the source;
- 2. Submitting work that has been prepared by another person;
- 3. Using books or other materials without authorization while taking examinations;
- 4. Taking an examination for another person, or allowing another person to take an examination in one's place;
- Copying from another's paper during an examination or allowing another person to copy from one's own and/or
- 6. Unauthorized access to an examination prior to administration.

Grade Appeals Procedure

1. (a) A student must initiate an appeal in writing within 20 class days from the date of the decision or action in question. In case of an appeal of a final grade, the appeal must be filed no later than the first 20 class days of the term following the one in which the grade was received. This written

- appeal should be sent to the instructor who awarded the grade in question. The appeal shall be received by the student and the faculty members. They shall mutually attempt to resolve the appeal within five class days from the receipt.
- (b) If the appeal is based on an interpretation of departmental or University policy, the student's academic adviser may also be present during the review process. In such case, there shall be a limit of five class days in which to resolve the appeal.
- 2. An appeal not resolved at Step 1 shall be referred in writing by the student within five class days after the completion of Step 1 to the chairperson of the department of which the course in question is a part. If there is a departmental appeals committee, the problem shall be referred directly to it. The department chairperson or the departmental appeals committee shall normally submit a written response to the student within 10 class days following receipt of the written statement of the problem. A copy of this response shall also be provided to the instructor.
- 3. If no mutually satisfactory decision has been reached at Step 2, the student may submit a written appeal to the dean of the college or school in which the problem originated. Such an appeal shall be made within five class days following the receipt of the written response of the department chairperson or the departmental appeals committee. The dean shall investigate the problem as presented in the written documentation, review the recommendation and provide, in writing, a proposal for the solution of the problem within 10 class days following its referral.
- 4. If the problem is not mutually resolved by Step 3, the student may file an appeal with the Grade Appeals Board within five class days of the receipt of the written proposal from the dean. The request for an appeal must be submitted to the associate provost or, if appropriate, to the dean of graduate studies who will convene the Grade Appeals Board as soon as possible, but no later than 15 class days after the receipt of the written request.

Grade Appeals Board

1. Membership

A. The associate provost (or, if

- appropriate, the dean of graduate studies) serves as nonvoting chairperson. If the associate provost is not available to serve, the administration will appoint a substitute mutually acceptable to the student and the Association of Pennsylvania State College and University Faculties (APSCUF).
- B. A faculty dean not involved in the appeals process. A substitute may be appointed as given in "A" above.
- C. Two faculty members. At the beginning of each academic year, the Office of the Associate Provost shall randomly select two full-time faculty from each academic department in order to constitute the pool. Two faculty members from different departments will be randomly selected from this pool for each Appeals Board.
- D. Two undergraduate students or, if appropriate, two graduate students appointed by the president of the Student Government Association (SGA).

2. Attendance

- A. The faculty member involved may be assisted by an adviser, an APSCUF representative, or the chairperson of the department in which the problem originated.
- B. The student involved may be assisted by an adviser. The adviser may be another student, an administrator, or a faculty member.
- C. Such witnesses as are called on behalf of either the faculty member or the student.
- D. Resource persons or expert witnesses called at the request of the board. In the event that the decision making involves knowledge of the discipline, the board shall be required to utilize at least one resource person from the discipline, an expert adviser(s) to aid them in their decision making.

3. Procedure

A. Preparation for the Hearing — All parties must be informed of the complaint in writing by the chairperson of the Grade Appeals Board (hereafter referred to as "chairperson"), normally within five class days after the receipt of the complaint. Copies of documents and correspondence filed with respect to the complaint shall be provided to the interested parties through the chairperson. Thereafter, neither

new evidence nor new charges shall be introduced before the board. The chairperson shall notify in writing the interested parties of the exact time and place of the hearing and shall provide existing University and/or Commonwealth policies relevant to the appeal at least five class days before the beginning of the proceedings. Throughout these proceedings, the burden of proof rests upon the person bringing the appeal.

B. Hearing Procedure — During the hearing, both the faculty member and the student shall be accorded ample time for statements, testimony of witnesses, and presentation of documents.

C. Decision of the Appeals Board

- 1. The Grade Appeals Board shall deliberate in executive session and render a decision by majority vote within three days of the close of the hearing. The chairperson may participate in these deliberations but not vote.
- 2. The chairperson shall notify, in writing, the student, the faculty member, and the department in which the course in question is located of the decision within three class days of the board's final action. The notification shall include the basis upon which the decision was reached.

4. Other

- A. A written statement of the decision and relevant materials shall be placed in the student's academic file.
- B. A written statement of the decision and relevant materials shall be placed in the faculty member's file subject to the provisions of official commonwealth policy governing personnel files.

Notes

- 1. Both faculty member and student are entitled to the right of challenge for cause of any member of the department committee (if used) and the Grade Appeals Board except the chairperson. In the case of challenge at the Appeals Board level, the chairperson shall adjudicate the challenge. One challenge at each level is permitted.
- 2. A "class day" is defined as any day when classes are officially in session at West Chester University.
- 3. If the course in which the grade dispute occurred is offered under the auspices of a unit of the University

- other than an academic department, the program director/coordinator, head of that unit, and/or the department chairperson will function in Step 2 of the procedure. In Step 3, the appeal should then be made to the associate provost rather than the dean of the college/school.
- 4. If the professor is not on contract or in residence on the campus, he or she shall have the right to defer the procedure until his or her return. Similarly, if the procedure would normally occur during the summer and the student is not enrolled in any summer session, the procedure may be deferred until the fall semester at the student's request.

Academic Dishonesty Policy Academic Dishonesty Process

- 1. Academic dishonesty as it applies to students includes but is not limited to academic cheating; plagiarism; the sale, purchase, or exchange of term papers or research papers; falsification of information, which includes any form of providing false or misleading information, written or oral; or of altering or falsifying official institutional records.
 - Note: The Student Code of Conduct covers theft or attempted theft of property or services; destruction; vandalism; and the misuse or abuse of real or personal property of the University, any organizations, or any individual.
- Charges of academic dishonesty may be brought by any member of the University community.
- 3. Charges of academic dishonesty may be dealt with informally by the person bringing the charges and the student. A written agreement of the settlement shall be signed by both sides. An instructor may, on his/her own authority, apply a penalty to the student's grade, including failure in the course. If additional sanctions are requested, the appeals process must be employed and an academic integrity hearing must be convened.
- 4. If the informal process has not been employed or either party is not satisfied with the resolution under (3) above, then that party shall, within 14 calendar days, submit written notification to the department chair or unit director. The department shall then, within 14 calendar days, handle the matter according to its own procedures. The department, shall, within 14 calendar days of hearing the case, provide written notification of its decision to all parties.

- 5. If either party is not satisfied with the resolution reached in (4) above, that party may, within 14 calendar days of the department's decision, appeal the matter to the dean or appropriate administrator. The dean or administrator shall then, within 14 calendar days, handle the matter and provide written notification to all parties.
- 6. If either party is not satisfied with the decision of the dean or administrator, that party may, within 14 calendar days, appeal the matter to the Academic Integrity Board.

Membership

- 1. The associate provost (or if appropriate, the dean of graduate studies) serves as nonvoting chairperson. If the associate provost is not available to serve, the administration will appoint a substitute mutually acceptable to the student and the Association of Pennsylvania State College and University faculties (APSCUF).
- 2. A faculty dean not involved in the charging process. A substitute may be appointed as given in (1) above.
- 3. Two faculty members. At the beginning of each academic year, the Office of the Associate Provost shall randomly select two, full-time faculty from each academic department in order to constitute the pool. Two faculty members from different departments will be randomly selected from this pool for each Appeals Board.
- 4. Two undergraduate students or, if appropriate, two graduate students appointed by the president of the Student Government Association (SGA) or Graduate Student Association, respectively.

Hearing Procedures for Academic Integrity Board

The chair will provide notice to all parties.

- 1. Hearings shall proceed to the extent possible according to the following form:
 - (a) The hearings chair shall open the proceedings by reading the statement of charges;
 - (b) The charging party shall then present the case against the accused party. This shall be done by the submission of written, physical, and testimonial evidence. The accused party and the board shall have the right to conduct reasonable questioning of the charging party and the charging party's witnesses;
 - (c) At the conclusion of the charging party's presentation, the accused party may present a defense or may plead

to the charges. This shall be done by the submission of written, physical, and testimonial evidence. The charging party and the Hearing Board shall have the right to conduct reasonable questioning of the accused party and the accused party's witnesses;

- (d) After both cases have been presented, the Hearing Board shall allow presentation of rebuttal evidence;
- (e) At the close of the hearing, the Hearing Board shall allow closing arguments by the parties.
- 2. The board chair shall have authority and be responsible for maintaining an orderly procedure throughout the hearing.
- 3. All hearings are closed proceedings;
- 4. The burden of proof rests upon the individual bringing the charges;
- 5. All matters upon which the decision will be based must be introduced into evidence at the hearing;
- 6. Both parties shall have the right to be assisted by advisers, who may be attorneys, and who may be present at hearings. The provost or his/her designee must be notified in advance of the hearing who the advisers will be. The advisers may only consult and interact privately with their clients.
- 7. All hearings will be tape recorded. The audiotape record of the hearing will be archived in the Office of the Provost or his/her designee for five years. A written transcript of the hearing will be provided at the expense of the University when subpoenaed.
- 8. A written adjudication, arrived at by majority vote, in which the facts and reasons for the recommendation are set forth with reasonable specificity, shall be issued within seven calendar days after the close of the proceedings by the board and shall be sent to the provost and vice president for academic affairs with copies to all parties. The provost shall implement the recommendation of the board or shall provide, within seven University days, a written response to all parties explaining his/her reasons for declining to do so.
- 9. Any party who fails to appear at the hearing consents to the conducting of the hearing in his or her absence.
- 10. The University retains the right to continue a hearing whenever necessary and appropriate.

Appeals

1. Either party may appeal the recommendation of the board to the provost or

his/her designee within seven calendar days. Any stay of sanction shall be granted only upon application to and at the sole discretion of the provost or his/her designee. The decision of the provost shall be final.

Sanctions

- 1. At the conclusion of the appeals process, a student may be exonerated or subject to any combination of the following range of penalties:
 - (a) The board, with the approval of the instructor, may apply a penalty to the student's grade, including failure in the course.
 - (b) Disciplinary probation: The student is informed in writing that he or she is being placed on disciplinary probation for a specific period of time. This action is a period of official censure. A probation action may specify any conditions with which the individual must comply or any privileges which may be withheld. Probation may include the loss of privilege to represent the University in an official capacity including but not limited to varsity and nonvarsity intercollegiate events, plays, and holding office in campus government or related organizations. If at any time during his or her probationary period the student violates University regulations, he or she may be subject to further disciplinary action from the University.
 - (c) Suspension: The student is informed in writing that he or she is being involuntarily suspended from the university for a designated period of time. The dean of students must be notified of the suspension. A student shall lose student status and may not attend classes, take exams, receive grades or be on University property except for authorized University business during the suspension period. Authorized University business must be approved in advance by the provost and vice president for academic affairs or designee. After the designated period of time, the student must seek approval from the provost and vice president for academic affairs to reapply to return through the Office of Admissions. The board may establish additional requirements which must be fulfilled to the satisfaction of the provost and vice president for academic affairs prior to reinstatement. There will be no refunding of fees. The assignment of

- grades shall be in accordance with University policy.
- (d) Expulsion: The student is informed in writing that he or she is being expelled from the University. This action is one of involuntary separation from the University. The relationship between the student and this University is permanently terminated. A student is not permitted on University property. There will be no refunding of fees. The assignment of grades shall be in accordance with University policy. The fact of the expulsion and the reason for it will be entered on the student's official transcript and on all copies thereof. A student who has been expelled for academic dishonesty will not be awarded a degree from West Chester University.
- (e) Restitution: Restitution may be imposed on students whose violation of these standards has involved monetary loss or damage. Restitution as imposed by the board becomes a financial obligation to the University.
- (f) Hold on records: When appropriate, the University may withhold transcripts, grades, degrees, diplomas, or other official records pending the disposition of cases.

Notes:

- 1. If the action occurs at the end of an academic session, the procedure may be deferred until the next appropriate session.
- 2. A written statement of the decision and relevant materials shall be placed in the student's academic file and sent to the student's academic adviser.

Obtaining Transcripts

Transcripts of work taken at West Chester University may be obtained from the Office of the Registrar. A check or money order, payable to West Chester University, must accompany a written request that should include the period of attendance at the University, degree status, the curriculum pursued, Social Security number, and any change of name during enrollment. For a description of the transcript fee, see "Fees and Expenses."

Changes in Name or Address

Students should immediately notify the Office of the Registrar, the Office of Graduate Studies and Sponsored Research, and their department of any change of address or change in name.

The Comprehensive (Area of Specialization Examination)

A comprehensive examination covers the student's major field and is constructed, administered, and evaluated by the faculty of the student's major department or program. Candidates must apply for the examination with the department. They are not eligible to take the examination prior to the semester in which all courses in the major discipline are completed.

Other Examinations

Other examinations may be required of degree students. All requirements given under the heading of the particular program should be carefully noted.

Research Requirements

Students should consult specific programs to determine whether independent study directed toward either the thesis or a research report is required, offered optionally, or omitted.

Application for Graduation

Each candidate for a master's degree must submit the following items to the Office of Graduate Studies and Sponsored Research: (1) a form indicating intent to graduate, with a copy to the chairperson of the candidate's department; (2) a check for \$45 made payable to the Commencement Fund; (3) a Commencement Fund Invoice Form; and (4) a Cap and Gown Order Form. All of these forms are available in a packet from the Office of Graduate Studies and Sponsored Research. Deadline dates for applying to graduate are: May graduation—February 1; August graduation—June 1; December graduation—October 1.

Submitting the Thesis for Binding

After approval by the department, theses must be typed in accordance with specifications contained in the "Guide to the Preparation of the Master's Thesis," a copy of which may be obtained from departmental offices or the Office of Graduate Studies and Sponsored Research. After the dean of graduate studies and sponsored research has approved the thesis, the student is responsible for transmitting all required copies to the library for binding.

Second Master's Degree

Students wishing to obtain a second master's degree from West Chester University must meet all academic requirements set by the Office of Graduate Studies and the department concerned, and must earn a minimum of 24 credits beyond the hours applied toward the first master's. All new credits and additional departmental academic requirements must have been completed within a six-year period preceding the awarding of the second degree.

Graduates Seeking Initial Teaching Certification

College graduates who wish to obtain initial teaching certification (Instructional I) should contact the Office of Certification, Recitation 201A.

Permanent Teaching Certification

The Instructional II (Permanent) Certificate is a permanent certificate issued to an applicant who has completed three years of satisfactory teaching on an Instructional I Certificate, attested to by the superintendent of the school district in which his or her most recent service was performed, or, in the case of an intermediate unit, the executive director, or in the case of an approved nonpublic school, the chief school administrator. In addition, the applicant must complete 24 semester hours of collegiate study at an approved four-year institution after receiving a baccalaureate degree.

IN-SERVICE PROGRAMS—The 24semester-hour requirement may be satisfied, in whole or in part, through in-service programs approved by the Secretary of Education of the Commonwealth.

Educational Specialist Certification

Commonwealth regulations also provide for certification as an educational specialist to those persons who successfully complete an approved program of study and have the recommendation of the training institution. The Educational Specialist Certificate is issued on two levels.

Educational Specialist I (Provisional) The Educational Specialist I Certificate is issued for entry into a professional position in the schools of the Commonwealth. The applicant must have completed an approved program of study, possess a baccalaureate degree, and been recommended for certification by the preparing institution.

Educational Specialist II (Permanent)
The Educational Specialist II Certificate is a
permanent certificate issued to an applicant
who has completed three years of satisfactory service on an Educational Specialist I
Certificate, and who has completed 24
semester hours of postbaccalaureate or
graduate study at a regionally approved

institution. In addition, the applicant must have received the recommendation of the superintendent of the school district in which his or her most recent service was performed, or in the case of an intermediate unit, the executive director, or in the case of an approved nonpublic school, the chief school administrator.

On June 1, 1987, the Pennsylvania State Board of Education implemented revisions to the Pennsylvania Code. These revisions require all students who apply for Pennsylvania teaching certificates to pass state competency tests in basic skills, general knowledge, professional knowledge, and specific knowledge of the subjects in which they seek teacher certification.

As changes are made in requirements for all certification programs, it is the student's responsibility to satisfy the new requirements.

Professional Certification

Several departments and programs, in addition to offering degrees, offer professional certificates on completion of a prescribed course of study. Consult the individual department or program listings regarding offerings.

Directory Information

The Family Educational Rights and Privacy Act defines the term "directory information" to include the following categories of information: the student's name, addresses, telephone numbers, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent educational agency or institution attended by the student. The University will limit information that is made public to categories such as these but will not necessarily publish all such information in every listing.

Students who do not wish to have any or all of such "directory information" published without their prior consent must file notice—undergraduates in the Office of the Registrar, and graduate students in the Office of Graduate Studies and Sponsored Research and in the Office of the Registrar. A signed, dated statement specifying items not to be published must be brought by the student to the appropriate office within the first 15 calendar days after the beginning of the fall semester.

University Services and Student Living

Francis Harvey Green Library

The Francis Harvey Green Library offers the graduate student an excellent environment for study and research. Housed in a modern, six-floor complex, the library provides a variety of services and facilities in support of graduate research and study.

The general collection of over 510,000 volumes and over 2,800 periodicals is augmented by an extensive micromedia collection of more than 350,000 volumes, including books, periodicals, newspapers, doctoral dissertations, maps, and an extensive collection of government publications. The total resources of over 860,000 volumes compare favorably with other major public and private research libraries in the West Chester area. The special collections include the Chester County Collection of Scientific and Historical Books; the Normal Collection (publications by faculty and alumni); the Ehinger Collection (a collection of historical books on physical education); the Biographies of the Signers of the Declaration of Independence by John Sanderson; and the Shakespeare Folios. Also worthy of note are the collections of children's literature, instructional media and music, and the Philips collection of autographed books.

The University library, through its staff of 13 professional librarians, provides the services required by students and faculty working in all areas covered by the University's instructional programs. Among the many services are reference, computerized on-line literature searching, interlibrary loan, and photoduplication. Use of the library is enhanced by an online catalog, automated circulation system, and a computerized network of indexes and abstracts on CD-ROM.

Housing

West Chester provides housing facilities for its graduate students on a limited basis for the regular school year and all summer sessions. Graduate students may be housed either in a designated section of a 24-hour quiet hour undergraduate residence hall or in selected units of the new South Campus apartment complex. Students in the undergraduate halls must be on the University meal plan; apartment residents have the option of any meal plan offered or no plan at all. Undergraduate hall rooms are all double occupancy; apartments are designed for five occupants in combinations of doubles and singles. Graduate students are expected to abide by all regulations appropriate to their living arrangements. Upon acceptance to graduate school, students may contact

the Office of Residence Life and Housing for additional information and applications for on-campus housing.

For assistance in locating a dwelling or apartment off campus, students may contact the Office of Off-Campus and Commuter Life.

The Office of Residence Life and Housing is located in the Sykes Student Union Building, 610-436-3307.

Off-Campus and Commuter Life

The Office of Off-Campus and Commuter Life (OCCL) is committed to meeting the diverse needs of off-campus and commuting students. The responsibilities of the office include the Off-Campus Housing Service, advising the Off-Campus Student Association, and serving as a community resource agent for the University and local government in all areas related to off-campus and commuting students.

Additional services provided to offcampus students by OCCL include landlord/tenant legal aid information and development of long-range plans and research on the profile and needs of off-campus students.

The Office of Off-Campus and Commuter Life is located in the Sykes Student Union Building, 610-436-3305.

University Policy for Storm Closings

When storm conditions affect the operation of the University, announcements are made over local radio and TV stations via a system of code numbers keyed to affected schools. Prefixes indicate whether the school will be closed or open later than usual. West Chester's numbers and applicable prefixes are:

853 — University number; this number with no prefix indicates classes will be cancelled for the day.

2853 — Evening classes will be cancelled.

On Tuesday or Thursday, either a two-hour delay or class cancellation will be called. Two-hour delays on these days will mean that 8 a.m. classes are cancelled and the class normally starting at 9:30 a.m. will start at 10 a.m. and continue to 11 a.m.

On Monday, Wednesday, or Friday, a one-hour delay means that the 8 a.m. class is cancelled. A two-hour delay means that both the 8 a.m. and 9 a.m. classes are cancelled.

Off-Campus Housing

Students who choose to live in the community must secure their own living accommodations. The Office of Off-Campus and Commuter Life will assist students in finding housing by providing a variety of materials such as an up-to-date listing of available housing and an apartment complex guide. As available student rental units in the West Chester area are at a premium, it is recommended that students interested in this type of living situation begin their housing search as far in advance as possible.

Student Health Center

The University maintains a Student Health Center staffed by physicians, nurse practitioners, and registered nurses. The Health Center staff is available to meet emergency and first-aid needs, and to perform routine treatment of minor illnesses and minor surgical conditions. The Health Center also offers programs designed to enhance wellness. disease prevention, and health education. The University does not furnish other medical care or bear the costs of medical or surgical treatment or hospitalization. The community of West Chester has qualified physicians and excellent facilities at the Chester County Hospital.

The Student Health Center is located in Ramsey Hall lower level and is open Monday through Friday from 8 a.m. until midnight, and Saturday from 10 a.m. to 6 p.m. Any emergencies during the night and on Sundays must be treated at the Chester County Hospital Emergency Room. The Health Center phone number is 610-436-2509.

Graduate students, their spouses, and dependents may take advantage of a group medical illness and accident insurance policy approved by the University. Under the same group plan, there is a separate summer policy. See the Student Health Center for information and brochures.

Faculty and staff are treated for emergencies only.

Information Services

Information Services provides computing resources for a wide variety of users, both academic and administrative. Many of the University's administrative functions, such as registration, grade reporting, and billing depend heavily on the campus-wide transaction processing system, which provides centralized access to

University data from workstations located throughout the campus.

More importantly, computing is a vital instructional and research tool. Information Services offers students and faculty a wide range of computing resources, including a mainframe, microcomputers, printers, plotters, graphics workstations, digitizers, and optical scanners. Many of these facilities are available at various campus locations, but the Academic Computing Center on the ground floor of Anderson Hall serves as a focal point of instructional computing activity. A valid WCU ID card is required to use the Academic Computing Center. (For further information, contact the Academic Computing Center at 610-436-3349.) Computing facilities throughout the campus are joined by a high-speed network.

Off-campus, WCU faculty and staff can also access computing resources through modem facilities connected to this network. The network provides electronic mail capabilities for all campus workstations, connection to SSHEnet, PREPnet/Internet, and access to the University's main library catalogs.

The WCU network provides high-speed access to software applications (programming languages, spreadsheets, word processors, faculty-developed programs, etc.) and electronic communications capabilities to workstations. Student laboratory facilities are available in the Academic Computing Center and in each of the eight residence halls.

Students interested in acquiring a working knowledge of several commonly used software packages are encouraged to enroll in the introductory computing course, CSC501, offered by the Department of Mathematics and Computer Science.

Major hardware facilities include an IBM 9020 mainframe, numerous file servers, and IBM, MacIntosh, Apple, NeXT, DEC, and SUN workstations. Laser printers are also available for student use.

Information Services is located in Anderson Hall, 610-436-2828.

Bookstore

The Student Services, Inc. Bookstore, located in the Sykes Student Union Building, provides the campus with textbooks, supplies, and other course material for academic programs. In

addition, the bookstore offers a wide range of general reading and reference materials, WCU clothing and gifts, cards, snacks, and health and beauty products.

The SSI Bookstore accepts Visa, MasterCard, MAC, and personal checks accompanied by a valid ID.

Store hours:

Mon.-Thurs.-Fri. 8:15 a.m.-4:15 p.m. Tues.-Wed. 8:15 a.m.-6:00 p.m.

Hours are extended at the beginning of each semester and for special events throughout the year. Students can call 610-436-2242 for information.

Career Development Center

The University provides career planning and placement services for its students and graduates.

The Career Development Center's library provides information about careers, federal and state government positions, application forms, procedures, and job requirements.

The center also maintains listings of job vacancies in business, education, and industry.

The services available to graduate students are credential file development; career counseling; resume referral; and an on-campus interview program, which includes interviews arranged by the Career Development Center; and the use of private facilities for on-campus interviews arranged by the applicant. A computerized database of vacancies is available as well as a computerized system for making the candidate's resume available to Delaware Valley employers. A fee is charged for the development and service of a credentials file.

The Career Development Center is located in Room 106 Lawrence Center, 610-436-2501.

Minority Affairs

The Office of Minority Affairs is dedicated to the development of multicultural sensitivity, understanding, and appreciation of diversity among students. The office develops and implements comprehensive programs aimed at addressing the needs and concerns of the minority student. It also serves as a consultant to other University offices regarding minority students and aids in projects focused on improving the general campus climate for minorities. The office is located in 108 Lawrence Center, 610-436-3273.

Public Safety

West Chester University is concerned about the safety and welfare of all campus members and is committed to providing a safe and secure environment. Campus security is the responsibility of the University's Department of Public Safety, located in the Peoples Maintenance Building at the corner of Church Street and University Avenue.

Because no campus is isolated from crime, the University has developed a series of policies and procedures to ensure that every possible precautionary measure is taken to protect members of the University community while they are on campus.

A full explanation of the University's security policies and procedures, as well as additional pertinent information, appears in a publication called "Your Safety Is Our Concern," which is available from the Office of Graduate Studies and Sponsored Research, and from the Department of Public Safety.

Vehicle Registration

All administrators, faculty, staff, eligible students, and visitors desiring to use designated parking lots must register their vehicles with the Department of Public Safety and purchase/obtain parking decals. Resident students with less than 63 credits and commuter students with less than 25 credits (as of September of the academic year in which they wish to register a vehicle) are ineligible to park on North Campus. The annual registration fee will be set by the president upon recommendation of the Parking Committee. For purposes of this document, "annual" is defined as September 1 until August 31 of the following year. Specific registration procedures will be announced yearly.

A valid, nonsuspended operator's license and vehicle registration card(s) must be presented at the time the vehicle is registered. Any change in the vehicle registration number must be reported to the Department of Public Safety immediately.

When you receive your decal, place it in your vehicle immediately. Instructions on placement are on the reverse side of the decal

Speech and Hearing Clinic

The Speech and Hearing Clinic, located at 201 Carter Drive, is operated by the Department of Communicative Disorders as a teaching-training facility for its undergraduate and graduate stu-

dents. The clinic provides diagnostic and therapeutic services for persons with speech, language, and hearing problems. These services are provided free of charge to West Chester University students, faculty, and staff, and to students enrolled at Cheyney University. A fee is charged to others who wish to use the services of the clinic.

Sykes Union Building

The Earl F. Sykes Union first opened in 1975 as the community center for West Chester University. During the past two years Sykes Union has undergone a complete renovation and expansion. The current facility of approximately 102,000 square feet is scheduled to open during the summer of 1995.

The Sykes Union, as a facility and an operation, is designed to encourage all members of the campus community to participate in a wide variety of cultural, social, educational, and recreational programs. This multipurpose facility features expanded facilities as well as new and improved services.

Building highlights include a 350-seat theater, a fitness center, an expanded bookstore, and an enlarged amusement game room, all on the ground floor. The first floor features an expanded dining area offering seating for 400, an outdoor dining terrace, and a large food servery. Also included on the first floor is a 5000-square foot multipurpose room designed for dances, concerts, banquets, and lectures, as well as the Union Information Center.

The second floor houses the Student Affairs Offices of the Vice President, Dean of Students, Assistant Vice President, Residence Life and Housing, Off-Campus and Commuter Life, Orientation and Parent Relations, Greek Life and Student Organizations, and Student Standards. The Student Services, Inc. Business Office and the Departments of Student Programming and Activities along with student clubs and organizations, are also located on this floor.

The third floor penthouse features a 25-unit computer lab with quiet study and seminar space. Sykes Union also features 13 meeting rooms accommodating groups ranging in size from 1 to 500. For information concerning Sykes Union please call the Information Center at 610-436-3360/2984.

Women's Center

The Women's Center addresses the special concerns of the increasing number of women students who enter West Chester University from high school or who return to school after time at home or in the job world. Located in Lawrence Center, the Women's Center provides a lounge area for conversation, study, peer advising, and special interest programs (lectures, films, etc.). For more information call 610-436-2122.

Children's Center

The Children's Center for the children of West Chester University students and employees is located in McCarthy Hall. The children participate in educational and developmental programs while their parents are in class or at work. The center is licensed by the Commonwealth of Pennsylvania, and all required registration materials must be completed prior to enrollment in the center. The center offers reduced rates to students and multiple child discounts. For more information, contact the Children's Center at 610-436-2388.

Graduate Student Association

The Graduate Student Association (GSA) is the student government of all persons enrolled in graduate programs. The primary objective of GSA is to promote the overall well-being of graduate students at West Chester University. All graduate students are members of the association by virtue of their graduate status. The GSA office is located in Wayne Hall.

Black Student Union

The Black Student Union, which was formed in 1971, is dedicated to the creation of a culturally meaningful atmosphere for black students at West Chester University. Black Student Union membership is open to all West Chester students, faculty, and staff—regardless of race, color, or creed—who have a concern for black social, political, cultural, and economic causes.

A major purpose of the organization is to broaden and enhance the academic and social life for black students at the University. The union's democratically structured constitution provides for an executive board, elected by the membership. The Black Student Union Office is located in the Sykes Student Union Building.

International Education

Established in 1986, the Center for International Programs is responsible for coordinating study abroad programs, international faculty exchanges, visitations by foreign scholars, and international programs for the campus and the broader community. In addition, the Center for International Programs actively promotes the development of an international curriculum, facilitates internships and independent study abroad, and provides a variety of essential services for the more than 300 international students from over 50 different nations.

Special summer study abroad opportunities are coordinated through the Center for International Programs. These have included classes in the People's Republic of China. The University's Institute for British Studies currently offers summer courses at Oxford University, England, and the School of Music regularly offers a summer program in Salzburg, Austria. In addition, the University sponsors a series of travel-study programs to numerous overseas locations, including the Galapagos Islands, Egypt, Soviet Union, China, Kenya, Australia, Nepal, and Morocco. These programs, which generally run from two to three weeks, are available to students as well as the community. Travel-study programs are generally offered in the summer or in January, during the semester break.

International travel and study opportunities for American and international students and for the community are expected to expand rapidly over the next several years. Anyone interested in taking advantage of study aboard and travel opportunities is encouraged to contact the Center for International Programs, 102 Old Library *, for details on current program options, 610-436-3529.

Institute for Women

The Institute for Women is an independent group designed to represent the interests of women on the campus. It serves as the parent organization for the Women's Center, the Women's Studies Program, and the Title IX and Sex Discrimination Board. The institute is headed by a director and a board of directors.

The institute sponsors a number of activities to enhance the self-esteem and

career success of women at the University: the Woman-in-Residence Program, Grace Cochran Research on Women Award, Visiting Professor Program, Graduate Grant, and Endowed Book Fund. The institute prepares periodic reports on the status of women at the University and also secures Charlotte W. Newcombe Scholarship Grants for mature second-career women. The Institute for Women is located in 211 Main Hall. For more information call 610-436-2464/2122.

Veterans Affairs

Under the provisions of Title 38, West Chester University is an accredited university for the education of veterans. The University cooperates with the Veterans Administration to see that honorably separated or discharged veterans receive every consideration consistent with either degree or nondegree admission standards.

All veterans, certain dependents of disabled or deceased veterans, and war orphans who wish to obtain educational benefits under the appropriate public laws must register with the Veterans Affairs Office at initial registration. Veterans must renew their registration with this office at the beginning of each subsequent semester and each summer session. The Veterans Administration requires students who are veterans to schedule at least nine credits per semester in order to receive full benefits under the G.I. Bill.

A representative of the Veterans Administration is in the Office of Financial Aid, 138 Elsie O. Bull Center, to counsel and act as a liaison between students and the Veterans Affairs Office in financial and other matters.

Honor Societies

The University participates in sponsoring an active chapter of Phi Delta Kappa, the international graduate honor society. Membership in the West Chester chapter, which was organized in 1956, is by invitation and recognizes scholarship in all fields of study.

Graduate students are eligible to participate in the activities of the undergraduate honor societies at West Chester University if they are members. These organizations are Alpha Epsilon, Alpha

Kappa Delta, Alpha Lambda Delta, Alpha Mu Gamma, Alpha Psi Omega, Eta Sigma Gamma, Gamma Theta Upsilon, Kappa Delta Pi, Pi Gamma Mu, Phi Kappa Delta, Pi Kappa Delta, Pi Kappa Lambda, Pi Mu Epsilon, Phi Alpha Theta, Phi Delta Kappa, Phi Epsilon Kappa, Phi Mu Alpha Sinfonia, Phi Sigma Tau, Psi Chi, Sigma Alpha Iota, and Sigma Tau Delta.

The Student Activities Council

The Student Activities Council (SAC) is one of the major programming organizations at West Chester University. Totally funded and voluntarily run by students. SAC creates and coordinates many of the activities and events on campus. By utilizing students' talents and energies, SAC strives to present a wide variety of programs that meet the needs and interests of the West Chester community. SAC is composed of six committees and an Executive Board, which presents programs in the areas of concerts, comedy, films, coffeehouse, and novelty. SAC also plays a major role in the planning and implementation of special events such as Welcome Week, Homecoming, and Spring Weekend. Membership is open to all students at all times. The Student Activities Council is located in the Sykes Student Union Building, 610-436-2336.

Recreational Services

The Office of Recreational Services provides leisure-time activities for the University community. Recognizing that the needs of individuals differ, Recreational Services provides activities in six program areas.

The Intramural Sports component affords students, faculty, and staff the opportunity to participate in individual or team competitive activities. The Intramural Sports program promotes health, wellness, and physical fitness, as well as encourages the worthy use of leisure time. Regardless of ability level, every individual can experience successful participation in a variety of individual or team athletic events.

For students who enjoy organized sports other than varsity athletics, the office provides the Sports Club component. This program is provided for students who are either skilled athletically or merely interested in participating in a club sport for sheer enjoyment of the activity. Becoming

^{*}Effective fall semester 1995, 102 Rosedale Ave.

a member of a club provides opportunities for instruction, coaching, socialization, competition, and fun. Physical education majors receive a sports credit through participation in a club program. Currently, West Chester University provides nine Sports Clubs: equestrian, fencing, ice hockey, karate, men's rugby, women's rugby, skiing, men's volleyball, and water polo.

Outdoor recreational opportunities are conducted through the Outdoor Resource Center (ORC). The ORC provides a variety of different trips and one-day activities for students throughout the year. We provide the following trips and activities: canoeing, rafting, skiing, camping, and spelunking trips; ice skating nights; hiking; and horseback riding. In addition to scheduling trips, the Outdoor Resource Center rents outdoor recreation equipment to students, faculty, and staff for their own use or activities. The following equipment is available for rental: canoes, backpacking equipment, tents, sleeping bags, camping equipment, and crosscountry skis.

For students who do not wish to participate in a formal recreational program, we provide the Open Recreation component. This component provides days, times, and facilities in which students may participate in an informal recreational activity. The semester calendar lists scheduled days and times for utilizing the following: swimming pools, weight rooms, indoor track, outdoor tennis courts, and basketball gymnasium.

The Aerobics program is one of our most popular and successful activities. Over 800 students, faculty, and staff participate in 21 different aerobic sessions. We provide toning sessions, low and high impact sessions, and step sessions. We require that all participants register for this program. Dates and times are listed on the semester calendar.

For more information on any compo-

nent provided by the Office of Recreational Services, call 610-436-2131 or 436-3088, or stop by Room 133, Ehinger Gymnasium.

Counseling and Psychological Services Department

The Counseling and Psychological Services Department, housed in the Counseling Center, is located on the second floor of Lawrence Center, 610-436-2301. The Counseling Center provides counseling services to all undergraduate and graduate students at West Chester University. The CPS faculty includes licensed psychologists who are experienced in working with college students. Students may discuss their concerns, feelings, hopes, and interests freely and in strict confidence.

COUNSELING SERVICES

Since the Counseling Center provides services for a wide range of concerns, each student's experience will be tailored to his or her request. Students may want to clarify their vocational or educational choices, improve their interpersonal skills, or resolve personal conflicts. Their choice of approach could include one or more of the following counseling center services:

- 1. Individual vocational counseling consists of a one-to-one counseling experience that focuses on the student's choice of major and vocation. Vocational choice is most solid when it is the outgrowth of understanding one's self. Such understanding requires time and thought, and involves the student's identifying his or her own style, values, interests, and abilities. Psychological testing, as well as discussion, often enhances self understanding.
- 2. Individual counseling for personal problem solving consists of a one-to-one counseling experience where the focus is on resolving personal con-

- flicts and conflicts with others, and on improving the student's expertise at making personally meaningful choices. It also may help some people avoid making decisions that may restrict their personal growth and undermine their well-being.
- 3. Group counseling consists of a small group of peers with one or more counselors. Such groups usually meet once each week to provide group members with constructive learning about themselves. Groups often have a specific focus. Past groups have focused on:

Elimination of self-defeating behavior Assertiveness training Anxiety management Test anxiety reduction Eating disorders Career exploration Procrastination—how to avoid it

- 4. Testing Information from psychological tests can be useful in increasing self understanding and can often assist in the process of vocational and educational decision making. Faculty members of the Counseling and Psychological Services Department are trained in the administration and interpretation of psychological tests. The student and his or her counselor can decide whether testing might be helpful. Arrangements also can be made at the Counseling Center for taking the Graduate Record Exam, Graduate Management Admissions Test, and the Miller Analogies Test—three graduate school admissions tests.
- 5. Consultation Services—Faculty members in the Counseling Center also are available to consult with staff and faculty members of the college community. They can assist with crises, program planning, group and interpersonal communications, and referral to other agencies.

Programs of Study and Course Offerings

Guide to the Catalog

The arrangement of course offerings is alphabetical by either department or program of study.

Students may obtain a typical sequence of courses for any program from the office specified in this catalog.

Please note that all courses, course descriptions, course sequences, and course substitutions are subject to change. Current information is available from the appropriate department chair, graduate coordinator, or program adviser.

For a guide to course prefixes, see page 92.

Structure of the University

COLLEGE OF ARTS AND SCIENCES

David H. Buchanan, Dean

Anthropology and

Geology and Astronomy

Sociology

History

Biology

Art

Mathematics and Computer

biology

Science Philosophy

Chemistry
Communication Studies

Physics

English

Psychology

Foreign Languages

Theatre Arts

SCHOOL OF BUSINESS AND PUBLIC AFFAIRS

Christopher M. Fiorentino, Dean

Accounting

Criminal Justice

Management Marketing

Economics and Finance

Political Science

Geography and Planning

Social Work

SCHOOL OF EDUCATION

Michael L. Hanes, Dean

Childhood Studies and Reading

Counselor, Secondary, and

Professional Education

Instructional Media

Special Education

SCHOOL OF HEALTH SCIENCES

John L. Eberhart, Interim Dean

Communicative Disorders

Physical Education

Health

Sports Medicine

Nursing

SCHOOL OF MUSIC

Mary Anne Rees, Dean

Instrumental Music

Keyboard Music

Music Theory and Composition

Music Education

Vocal and Choral Music

Music History and Literature

Accounting—See Business

Administration

105 Ruby Jones Hall West Chester University West Chester, Pennsylvania 19383 610-436-2438

Dr. James S. Milne, M.S.A., Program Director

CONCENTRATION ADVISERS

Dr. Gopal Sankaran, Health Services Administration

Dr. Arlene C. Rengert, Leadership for Women

Dr. James S. Milne, Individualized

Mr. Jay P. Brenneman, Human Resource Management Training and Development

Mr. A. Wayne Burton, Public Administration

Mr. Richard Yoder, Sport and Athletic Administration

Mr. F. Robert Bielski, Urban and Regional Planning

Program of Study

The Master of Science in Administration (MSA) is a multidisiplinary degree with areas of concentration in Health Services Administration, Leadership for Women, Individualized, Human Resource Management, Training and Development, Public Administration, Sport and Athletic Administration, and Urban and Regional Planning.

The degree is designed for persons with work-related experience desiring to enhance their administrative skills at the supervisory and mid-management levels. It is recommended that applicants have a minimum of three years', full-time work experience prior to matriculation. Those persons who lack the requisite work experience and/or plan to change careers need to incorporate relevant internships and other job experiences into their programs, which may require program enrollment beyond the minimum requirements stipulated in this catalog.

Undergraduate, prerequisite requirements might be necessary for applicants without adequate preparation in the area of intended concentration.

MASTER OF SCIENCE IN ADMINISTRATION

(36-42 semester hours)

The program consists of an 18-hour administrative core of courses plus 18–24 semester hours of courses in a selected concentration area as follows:

- 1. Administrative Core (required): ADM 501, 502, 503, 504, 505, and either 506 or 507
- 2. Area of Concentration*
 - a. Health Services Administration (See page 62.)
 - b. Leadership for Women (See pages 71-72.)
 - c. Public Administration (See page 85.)
 - d. Human Resource Management (See page 27.)
 - e. Sport and Athletic Administration (See page 69.)
 - f. Urban and Regional Planning (See pages 58-59.)
 - g. Training and Development (See page 27.)
 - h. Individualized (See pages 28-29.)

Admission Requirements

Applicants must submit official undergraduate transcripts denoting: receipt of bachelor's degree and majors from all undergraduate institutions attended; scores from the Miller Analogies Test, Graduate Record Examination or Graduate Management Admissions Test**; an essay with a clear focus on career plans; and two letters of reference from professional supervisors that address the applicant's administrative potential. All application materials are to be submitted to the Office of Graduate Studies and labeled: "Attention, M.S.A. Application of (student's name)." After these materials have been received by the Office of Graduate Studies, the M.S.A. director will schedule an admissions interview with the applicant.

Deadline for Applications

Normally, the application process must be completed and admission granted prior to course enrollment for the fall or spring semester. The deadline for applying for the fall semester is May 15, and the deadline for the spring semester is October 15. With the approval of the M.S.A. director, late applicants may register for one semester of course work, pending completion of the admission requirements. The M.S.A. program does not permit students to remain in nondegree status. All applications must be submitted on the approved WCU Graduate Application forms available from the Office of

Comprehensive Examination

Graduate Studies.

No comprehensive examination is required for the administrative core. However, in lieu of the examination, each of the six administrative core courses must be completed with a grade of at least "B." Selected concentrations in the M.S. in Administration program do require comprehensive examinations. Students are obligated to comply with concentration comprehensive examination policies in effect on the date of their admission to the program. Students must clarify the requirements for their programs with the appropriate concentration adviser.

Certificate in Administration

Dr. Milne, M.S.A. Director

The certificate in administration is designed for persons who desire to enhance their management and supervisory skills. To earn the certificate, students must complete the 18-hour administrative core required for the Master of Science in Administration with a minimum grade of "B" for each course. Those interested in the certificate option must follow and meet the same admissions criteria as full-degree students.

Degree students also may receive the certificate after completing the administrative core requirements with a minimum grade of "B" for each course.

Note: Receipt of the "Certificate in Administration" is independent of the graduation process. Application forms must be obtained from the M.S.A. Office and submitted to the M.S.A. director for processing.

CURRICULUM

1. Administrative Core

18 semester hours

A. Must take all 15 credits:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting and Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3)

B. Must select three credits:

ADM 506 Budgetary Process (3)

ADM 507 Liability for Managers (3)

^{*}Refer to departmental listings for concentration course descriptions.

**Diagnostic test scores are not required for persons who have already been awarded a master's degree. Applicants for the health services concentration must submit either GRE or GMAT scores.

COURSE DESCRIPTIONS ADMINISTRATION Symbol: ADM

Symbol. ADM

501 Administrative Theory and Environment (3) Organizational theory and practice in public and private institutions. Legal framework for administration, application of public policy, sociolegal issues, and values of society considered.

502 Computers for Managers (3) Quantitative applications in administration. Computer as a management tool. Computer basics and management information systems.

503 Accounting/Budgeting (3) A study of accounting principles and procedures for both profit and nonprofit organizations.

Emphasis is on the concepts and effects of accounting policies and procedures with which the administrator will normally come into contact.

504 Communication for Administrators (3) Development of communication skills for the effective writing of letters, memos, reports, and proposals. Structuring and conducting meetings and presentations.

505 Organizing Human Resources (3) Administrative models and concepts of human behavior in formal organizations and decision processes. Personnel administration. Effective selection, use, and development of human resources for the total organization. Affirmative action and equal opportunity.

506 Budgetary Process (3) Budget forecasting

and implementation. Analysis, planning, and control of sources and allocation of funds. Measurement and control mechanisms such as Program Planning Budgeting System (PPBS), Zero-Base Budgeting (ZBB), and Management by Objective (MBO) emphasized.

507 Liability for Managers (3) Study of the law of civil and criminal liability of managers in the profit and not-for-profit sections. Review of the law of defense and liability protection for individual and organization. Facility safety and health liability, personnel law emphasized.

600 Research Report (3)

612 Internship (3-6) Intensive field placement in organization under faculty guidance and supervision. Precontracted learning objectives.

Training and Development

Mr. Brenneman, Program Concentration Adviser Dr. Milne, M.S.A. Director

Training and Development is a concentration within the Master of Science in Administration program. The thrust of this concentration is to prepare training and development supervisors who, in turn, will develop and coordinate inhouse programs/staff development services for line managers.

CURRICULUM

1. Administrative Core

18 semester hours

A. Must take all 15 credits:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting/Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3)

B. Must select three credits:

ADM 506 Budgetary Process (3) ADM 507 Liability for Managers (3)

2. Training and Development Core

18 semester hours

A. Must take all 12 credits:

COM 503 Communication and Persuasive Influence (3) COM 506 Communication in Small Groups (3) PSY 563 Performance Analysis (3) PSY 567 Training and Psychology (3)

- B. Must select six credits chosen under advisement
- C. Internship (3–6 credits):
 ADM 612 Internship (3–6 credits)
 (Required only for students who lack appropriate experience)
- 3. NOTE: Combined with an administration core of 18 required credits, the M.S.A./Training and Development concentration would require a minimum of 36 credit hours, exclusive of internship.

CORE COURSE DESCRIPTIONS PSYCHOLOGY Symbol: PSY

563 Performance Analysis (3) An accomplishment-based approach to the analysis of human performance. Topics include measurement and analysis of performance opportunities, and strategies for improving performance.

567 Training and Psychology (3) An overview of the training process in organizations. Topics range from needs analysis to evaluation of training programs.

COMMUNICATION STUDIES Symbol: COM

503 Communication and Persuasive Influence (3) An analysis of major conceptual approaches

to persuasion and their implications for understanding influence contexts and designing pragmatic strategies.

506 Communication in Small Groups (3) An examination of traditional and contemporary research that pertains to various dimensions of small group communication including, but not limited to, the following topics: structure, size, tasks, goals, roles, systems, and leadership.

Human Resource Management

Mr. Brenneman, *Program Concentration Adviser* Dr. Milne, M.S.A. *Director*

The concentration in human resource management is designed for persons who want to enhance their knowledge of organizational personnel theories and techniques. It is appropriate both for persons interested in human resource management as a career and for operations managers who want to enhance their supervisory skills in employee assessment, placement, evaluation, and development.

CURRICULUM

1. Administrative Core

18 semester hours

A. Must take all 15 credits:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting and Budgeting (3)

ADM 504 Communications for Administrators (3)

ADM 505 Organizing Human Resources (3)

B. Must select three credits: ADM 506 Budgetary Process (3) ADM 507 Liability for Managers (3)

2. Human Resource Management Core 18-24 semester hours

A. Must take 9 - 12 credits:

ADM 500 Methods and Materials of Research in Administration (3)

and/or

PSY 501 Statistics I (3)

PSY 524 Psychometrics (3)

PSY 560 Advanced Industrial Psychology (3)

B. Must select 3 credits:

(The class selected may not be selected as an elective under section C.)

PSY 445 Organizational Development (3)

PSY 562 Organizational Psychology (3)

C. Must select 3 - 6 credits, chosen under advisement:

PSY 445 Organizational Development (3)

PSY 562 Organizational Psychology (3)

PSY 563 Performance Analysis (3)

PSY 564 Human Factors (3)

PSY 566 Seminar in Industrial/Organizational Psychology (3)

PSY 567 Training and Psychology (3)

D. Internship (3 -6 credits):

ADM 612 Internship (3-6)

or

PSY 630 Internship in Industrial/Organizational Psychology (3)

(May be taken under advisement and is required for students who lack appropriate experience)

Individualized Concentration

Dr. Milne, Program Concentration Adviser and M.S.A. Director

This concentration is designed for persons who have achieved a high level of career success in their chosen fields. Those admitted will have evidenced significant career mobility and will be enhancing their knowledge base by enrolling in an individually developed set of courses after it has been proposed and approved by the concentration adviser and a contractual agreement has been developed.

CURRICULUM

1. Administration Core

18 semester hours

A. Must take all 15 credits:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting/Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3)

B. Must select three credits:

ADM 506 Budgetary Process (3)

ADM 507 Liability for Managers (3)

2. Individualized Core 18 semester hours

A. Required (3 credits)

ADM 600 Research Report (3)

To encompass career goal theme

B. Electives (15 credits)

Subject to advisement/acceptance of an approved personal program proposal. Courses to be approved from among 500-600 level WCU graduate courses designed to fulfill the personal program proposal as approved.

C. Internship (3-6 credits)

Required for students without sufficient, relevant administrative experience. Internships are in addition to the 15 credit hours of electives for such students. Internships are not required for students with sufficient management experience, but these students may enroll for relevant internships as part of the 15-hour elective credit requirement, provided the work requirements of

such are different from enhancements of the person's normal work assignments (i.e., students cannot earn internship credit by performing their normal work responsibilities).

The M.S.A./Individualized internship arrangement/ requirements are to be confirmed in writing either by the concentration adviser or the M.S.A. director.

The following M.S.A. programs are coordinated by the department listed:

Health Services Administration

Dr. Sankaran, Program Concentration Adviser Dr. Milne, M.S.A. Director

The health services administration concentration, offered by the Department of Health, is designed to meet the needs of persons interested in entering the field of health administration, and of persons presently in health administration who are interested in upgrading their skills. See the listing under the Department of Health section for further information and course descriptions.

Leadership for Women

Dr. Rengert, Program Concentration Adviser

Dr. Milne, M.S.A. Director

The women in leadership concentration, offered by the Women's Studies program, is designed to enable the student to develop a mode of leadership appropriate to workplaces in which access to organizational power is inequitable for sexes of equal training and talent. See the listing under the Women's Studies section for further information and course descriptions.

Public Administration

Mr. Burton, *Program Concentration Adviser* Dr. Milne, M.S.A. Director

The concentration in public administration, offered by the Department of Political Science, focuses on public management at the local and regional levels. It is appropriate for public managers and officials from local, county, and regional

governments who desire to enhance their general management skills as well as gain insight into public issues of particular concern to local officials. See the listing under the Department of Political Science for further information and course descriptions.

Sport and Athletic Administration

Mr. Yoder, Program Concentration Adviser Dr. Milne, M.S.A. Director

The sport and athletic administration degree, offered by the Department of Kinesiology (formerly Physical Education), focuses on the development of athletic administrators who aspire to leadership roles in athletics, and who must adapt to the everchanging responsibilities of interscholastic and intercollegiate athletics. See the listing under the Department of Kinesiology for further information and course descriptions.

Urban and Regional Planning

Mr. Bielski, Program Concentration Adviser Dr. Milne, M.S.A. Director

The urban and regional planning concentration, offered by the Department of Geography and Planning, focuses on land use development and management at the local, county, and regional levels. It is appropriate for those who desire to enhance their knowledge of comprehensive planning, zoning and mapping, and demographic and environmental impact as such affect the decision-making processes of public officials. See the listing under the Department of Geography and Planning for additional information and course descriptions.

Anthropology and Sociology

101C Old Library Building West Chester University West Chester, PA 19383 610-436-2556

Dr. McConatha, Chairperson

PROFESSORS

Marshall J. Becker, Ph.D., University of Pennsylvania Harvey C. Greisman, Ph.D., Syracuse University Nelson W. Keith, Ph.D., Rutgers—The State University Douglas McConatha, Ph.D., University of Utah Leigh Shaffer, Ph.D., Pennsylvania State University Paul A. Stoller, Ph.D., University of Texas

ASSOCIATE PROFESSORS

Bonita Freeman-Whitthoft, Ph.D., University of Pennsylvania Patrick W. Luck, Ph.D., University of Connecticut Martin Murphy, A.M., University of Michigan

ASSISTANT PROFESSORS

Helen A. Berger, Ph.D., New York University Jon A. Cowen, A.M., University of Pennsylvania Edmundo Morales, Ph.D., City University of New York Anthony Zumpetta, Ed.D. Indiana University of Pennsylvania

The Department of Anthropology and Sociology offers, on a limited basis, graduate courses in anthropology and sociology to graduate students from other areas as well as to advanced undergraduate majors and nonmajors.

COURSE DESCRIPTIONS ANTHROPOLOGY Symbol: ANT

512 Ethnographic Studies (3) Intensive survey of a single culture area. Area for study announced in advance.

599 Independent Studies in Anthropology

(1-3) PREREQ: Approval of instructor and department chairperson.

SOCIOLOGY Symbol: SOC

515 Mental Illness in Social Context (3) A sociological perspective on the cause and treatment of mental disorders, including a critical

analysis of public policy on mental health services.

532 History of Sociological Theory (3) Development of sociological thought.

590 Independent Studies in Sociology (1-3) PREREQ: Approval of instructor and department chairperson.

Art

Mitchell Hall West Chester University West Chester, PA 19383 610-436-2755

Mr. White, Chairperson

PROFESSORS

Gus V. Sermas, M.F.A., University of Wisconsin Ruth I. Weidner, Ph.D., University of Delaware

ASSOCIATE PROFESSORS

Victor Lasuchin, M.F.A., University of Pennsylvania Carolyn G. Simmendinger, M.F.A., Tyler School of Fine Arts of Temple University Linwood J. White, M.F.A., University of Pennsylvania

ASSISTANT PROFESSORS

John Baker, M.F.A., University of Delaware
Richard E. Blake, B.F.A., Tyler School of Fine Arts of
Temple University
Belle C. Hollon, M.F.A., University of Wisconsin
Margaret Schiff, M.F.A., Syracuse University
Mary C. Stieber, Ph.D., Princeton University
Donna Usher, M.F.A., University of Delaware

The Department of Art offers, on a limited basis, graduate courses in art to graduate students from other areas.

COURSE DESCRIPTIONS

Symbol: ART unless otherwise noted. ARH 500 Art Seminar (3) Special topics to be announced for studio and art history. Offered periodically as appropriate. PREREQ: Permission of instructor.

516-517 Painting 1-11 (3) (3) Extensive experimentation in studio problems and directions. The strategies of technique and a personal style are explored. Each section of this course varies with the instructor.

520 Painting: Independent Projects (3) Individualized instruction at an advanced level. Development of professional, personal, and imaginative statements leading to formation of the student's pictorial identity.

521 Sculpture 1 (3) Introduction to sculpture via the fundamentals of 3-D design. Use of basic tools, development of skills, techniques, and processes in creating sculpture. Projects in plaster, clay, stone, and wood.

525 Multimedia Workshop in Sculpture ttt (3) Fabrication methods and techniques, using wood, plastic, and various metals.

531 Ceramics 1 (3) Ceramic techniques and aesthetics of clay, leading toward development of creative expression. Exercises in hand-built and wheel-thrown forms. Formulation of clay bodies,

glaze bodies, and calculations; loading and kiln firing techniques. Also, basic exercises for elementary and secondary teaching levels.

532 Ceramics tt (3) Further development of expression for those who have mastered basic ceramic processes. Research in clay bodies, glaze chemistry, firing techniques, and kiln construction. Creative problems.

533 Ceramics: Studio Problems (3) Individual projects involving the total or specialized areas of the ceramic process. Practical experience through helping to maintain the ceramic complex.

534 Ceramics: Independent Projects (3)

541 Printmaking: Relief, Independent Projects (3) Advanced study with individualized instruction. Collagraph, lino-cut, and woodcut techniques. Combining various printing processes with relief printmaking.

546 Drawing: Independent Projects (3) Advanced study with individualized instruction. Emphasis on professional, personal, and imaginative statements leading to the student's iconographic identity.

547 Two-Dimensional Design: Independent Projects (3) Advanced study with individualized instruction. Design elements and analytical principles of organization. Emphasis on professional, personal, and creative statements leading to (formation of) professional employment.

549 Graphic Design: Independent Projects (3) Advanced study with individualized instruction. Developing means for solving communication problems of diverse character with emphasis on practical application. Projects are refined into portfolio presentations for professional employment

551 Art Education in the Elementary School (3) Current trends in art education for the elementary school.

565 Crafts: Independent Projects (3) Projects involve varied media and their techniques and processes. Exploration of 2-D and 3-D crafts and their application in recreational and elementary school programs.

566 Crafts: Weaving 1 (3) Basic techniques of weaving are explored with emphasis on fabric design and craftsmanship.

567 Crafts: Weaving tl (3) Provides opportunities for the weaver to further explore and develop skills as a designer. Emphasis is placed on the interrelationships between functional materials and design processes.

568 Crafts: Weaving ttt (3) To resolve advanced weaving problems in projects of an individual, creative nature leading to practical application.

590 Independent Studies in Art (1-3)

Astronomy—See Geology and Astronomy

Biology

211 Schmucker Science Center West Chester University West Chester, PA 19383 610-436-2318

Dr. Potvin, Chairperson

Dr. Greenamyer and Dr. Slusher, Coordinators of Graduate Studies

PROFESSORS

Marianne K. Eleuterio, Ph.D., University of Delaware G. Winfield Fairchild, Ph.D., University of Michigan Frank Eliot Fish, Ph.D., Michigan State University Martha A. Potvin, Ph.D., University of Nebraska Ronald F. Romig, Ph.D., University of Delaware Jack Waber, Ph.D., University of Hawaii Richard I. Woodruff, Ph.D., University of Pennsylvania

ASSOCIATE PROFESSORS

John T. Beneski Jr., Ph.D., Washington State University Robert W. Bernhardt, M.S., Syracuse University Steven L. Broitman, Ph.D., Princeton University Georgann Cullen, M.A., Kent State University Maureen T. Knabb, Ph.D., University of Virginia Gustave Mbuy, Ph.D., University of Cincinnati Elise Triano, Ph.D., Thomas Jefferson University

ASSISTANT PROFESSORS

Sharon E. Began, Ph.D., Southern Illinois University Judith J. Greenamyer, D.V.M., Ohio State University Leslie B. Slusher, Ph.D., Pennsylvania State University Harry M. Tiebout III, Ph.D., University of Florida Russell H. Vreeland, Ph.D., University of Nebraska

Admission Requirements

Applicants must meet the general requirements for admission to degree study at West Chester University and must submit scores for the general and advanced biology sections of the Graduate Record Examination. Additional prerequisites include a minimum of two semesters of general chemistry, two semesters of organic chemistry, one semester of physics, one semester of calculus, and at least 17 semester hours of course work in the biological sciences.

DEADLINE DATES FOR APPLICATIONS: February 15 for all students wishing to be considered for graduate assistantships for the following September; April 15 for the fall semester; October 15 for the spring semester.

MASTER OF ARTS IN BIOLOGY

Degree Requirements

Thesis Option

The student must complete a minimum of 30 semester hours, of which at least 24 hours must be taken in biology. BIO 511, BIO 513, BIO 514, BIO 591, and BIO 610 are required. Six semester hours or two courses may be taken in allied departments with the approval of the student's thesis committee. The student must perform well in a final thesis defense at the end of the program.

Nonthesis Option

The student must complete a minimum of 36 semester hours, of which at least 27 hours must be taken in biology. BIO 511, BIO 513, BIO 514, and BIO 609 are required. Nine semester hours or three courses may be taken in allied disciplines. The student must perform well in a comprehensive written examination at the end of the program.

COURSE DESCRIPTIONS BIOLOGY

All courses are designated as BIO except for stand-alone laboratory courses (e.g., BIL 534). Students also should sign up for the laboratory component of each course.

Numbers in parentheses at the end of course descriptions indicate the number of hours of lecture and lab, respectively. Prerequisite for graduate course attendance is admission to the degree program or permission of the graduate coordinator.

- 511 Experimental Design and Analysis (3) An introduction to the design and analysis of biological research. An independently conducted research project is a required part of the course. Lab BIL 511. (2, 3)
- 513 Research Techniques in the Biological Sciences I (3) An introduction to the theory and application of histological techniques, and light and electron microscopy. (0, 3)
- 514 Research Techniques in the Biological Sciences II (3) Introduces students to the theory and practical application of selected techniques in biological research, such as radioisotope labeling techniques, spectrophotometry, and various chromatographic procedures. (0, 3)
- 521 Cell and Molecular Biology (4) A lecture and laboratory course covering the molecular bases of cellular life. Eukaryotic cell structure and function will be emphasized. Lab BIL 521. (3, 3) PREREQ: Cell physiology, one year of organic chemistry.
- 528 Animal Histology (3) Structure and function of animal tissues and organs. Lab BIL 528. (2, 2)
- 530 Human Genetics (3) Basic genetic theories as they apply to the study of humans; chemical basis of inheritance; biochemical variation; cytogenetics; somatic cell developmental, behavioral, and population genetics of man; immunogenetics; quantitative inheritance, treatment, and prevention of genetic disorders; relationships between viruses, genes, and cancer; social, legal, and psychological aspects of human genetics. (3, 0) PREREQ: Introductory genetics.
- 531 Molecular Genetics (3) This course exposes graduate students interested in gene manipulation to up-to-date information in procaryotic and enkaryotic genetics. Intended as a companion course to BIL 534. (3, 0) PREREQ: Introductory genetics, one year of organic chemistry.
- BIL 534 Introduction to Recombinant DNA Methodology (3) Laboratory techniques for gene manipulation; growing and utilizing plasmid and virus vectors; use of restriction endonucleases; analysis and recovery of DNA by electrophoresis; gene cloning in *Escherichia coli*; and site-specific mutagenesis. (0, 6) PREREQ: Microbiology, biochemistry.
- 535-538 Course Topics in Biology (1-3) Courses in this series are of timely interest and

- are not offered on a regular basis. Courses may include either lecture or laboratory instruction, and may concern a wide range of topics in biology not covered by regularly scheduled courses.
- 547 Growth and Development (3) Discussion course dealing with current topics in the field of developmental biology. (3, 0) PREREQ: Genetics and embryology recommended.
- 548 Animal Development (4) Introduction to principles of animal development with laboratory study of selected vertebrate embryos. Lab BIL 548. (3, 3) PREREQ: Cell physiology, genetics, zoology.
- 552 Comparative Parasitology (3) Morphology and life cycles of the important parasites of man and animals; epidemiology, pathogenesis, and methods of treatment and control. (3.0)
- 554 Mycology (3) An introductory course, including a general study of the biology of fungi and a survey of the field of medical mycology. (3, 0) 556 Virology (3) Molecular biology of bacterial, plant, and animal viruses; virus classification, ultrastructure, mechanisms of replication, and effects of virus infection on host cells. (2, 3) PREREQ:
- 557 Functional Animal Morphology (3) A study of the structure, form, and function of morphological adaptations in animals as examined through a mechanical, ecological, and evolutionary perspective. (3, 0)
- 564 Microbial Physiology (3) Physiology and biochemical variations are studied in the prokaryotes and lower eukaryotes. Lab BIL 564. (3, 3) PREREQ: Microbiology.
- 565 Immunology (4) Immunoglobin structure and function, nature of antigens, cell-mediated immunity, hypersensitivity, regulation of immunity, and immunological diseases. Laboratory experience in immunological techniques. Lab BIL 565. (3, 3) PREREQ: Microbiology.
- 566 Plant Physiology and Biochemistry (3) Plant-cell physiology, including respiration, photosynthesis, enzyme catalysis, auxins, and membrane phenomena. Lab BIL 566. (2, 3) PREREQ: College botany.
- 567 Endocrinology (3) An integrative look at the physiology of the mammalian endocrine system in the regulation and maintenance of homeostasis. The pathology associated with hormone imbalance will be included. (3, 0) PREREQ: Cell physiology and mammalian physiology.
- 568 General Animal Physiology (4) General theoretical and applied principles of the physiology of various animal cells, tissues, and organs, with an emphasis on homeostasis and mammalian physiology. Lab BlL 568. (3, 3)
- 570 Population Biology (3) A quantitative second course in ecology, emphasizing distributional patterns and fluctuations in abundance of natural populations. Lab BIL 570. (2, 3) PREREQ: General ecology.
- 571 Wetlands (3) A course designed to provide practical experience in wetlands classification, delineation, regulation, management, and mitiga-

- tion practices. The abiotic and biotic characteristics of inland and coastal wetlands are emphasized. Lab BIL 571. (2, 3) PREREQ: Eight hours of biology or permission of instructor.
- 572 Aquatic Biology (3) An introduction to the ecology and identification of aquatic organisms, with emphasis on the biota of streams and wetlands. Lab BIL 572. (2, 3) PREREQ: Botany, zoology, general ecology.
- 575 Plant Communities (3) A survey of ecological, morphological, and physiological strategies of plants from seed through adult stages. The integration of these strategies to explain the major plant communities of North America will be covered. Lab BIL 575. (2, 3) PREREQ: General biology.
- 576 Limnology (3) The measurement and analysis of the physical, chemical, and biological properties of freshwater environments, with emphasis on lake ecosystems. Lab BIL 576. (2, 3)
- 580 Light Microscopy and the Living Cell (3) Theory and practical techniques of all types of light microscopy and their uses in investigating living cells. Also includes techniques such as microinjection, cell electrophysiology, and others. Strong emphasis on "hands-on" work with equipment. (2, 2)
- 584 Epidemiology (3) A general study of the epidemiology of both infectious and environmentally related health problems. Methods of interviewing and data collecting also are included. (3, 0) PRE-REQ: Microbiology.
- 585 Systematic Botany (3) Principles of taxonomy and biosystematics. Selected plant families from tropical and temperate zones. Each student develops a proficiency in the use of modern flora and knowledge of the common species of the spring flora of Chester County. Lab BIL 585. (2, 3) PREREQ: Botany.
- 591 Directed Research 1 (3) To be taken when the student begins his/her thesis research. Includes a comprehensive literature search and development of specialized techniques. This course should culminate in the acceptance of the thesis proposal by an appropriate committee of faculty and is required for degree candidacy.
- 592 Directed Research II (3) A continuation of the research proposed and initiated in BIO 591. To be taken for credit only with the approval of the graduate coordinator. (Does not count towards 30 credits required for graduation.)
- 593 Directed Research III (3) A continuation of the research proposed and initiated in BIO 591. To be taken for credit only with the approval of the graduate coordinator. (Does not count towards 30 credits required for graduation.)
- 609 Guided Study in Biology (3) All nonthesis students must complete a laboratory, field, or library research project under the guidance of one of the biology faculty. PREREQ: Completion of core courses. 610 Thesis (3)

Business

Master of Business Administration Program

317 Anderson Hall West Chester University West Chester, PA 19383 610-436-2608

Prof. Hamilton, M.B.A. Director

Program of Study

The Departments of Accounting, Economics, Management, and Marketing jointly offer a program leading to the Master of Business Administration (M.B.A.) with areas of concentration in Economics/Finance; Executive/General Business; and Management. The M.B.A. program is designed for individuals of diverse academic backgrounds, provided that they have undergraduate course work or the acceptable equivalent in accounting, economics, management, marketing, and quantitative business analysis. The program consists of 27 semester hours of core courses plus nine semester hours of courses selected from the concentration.

M.B.A. classes meet in two separate formats. For the regular weekday evening program, each course meets one night per week throughout the semester.

For the Accelerated Program, classes meet every third weekend: Thursday evening, Friday evening, and Saturday morning and afternoon. This is an intensive, two-year program designed to provide increased management skills for people who already have significant professional and/or management responsibilities. Typically, these individuals are middle- and upper-level managers who want to earn an M.B.A. without interrupting their careers.

Both formats have the same course work and requirements.

M.B.A. students are expected to have access to a computer.

MASTER OF BUSINESS ADMINISTRATION

(36 semester hours)

1. Required Core 27 semester hours

ACC 501 Managerial Accounting and Control

ECO 547 Managerial Economics

FIN 501 Financial Management

MGT 511 Management and Organization Theory

MGT 560 Business Communications

MGT 599 Strategic Management

MIS 501 Management Information Systems

MKT 501 Marketing Management

BLA 501 Legal Environment of Business. Required for those who have not completed an acceptable undergraduate law course; if such a course was completed, one of the following must be selected:

MGT 513 Business and Society, or

MGT 531 Human Resources Management, or

MGT 541 Production and Operations Management, or

MGT 561 International Business

2. Areas of Concentration

9 semester hours

Economics/Finance

Required:

ECO 525 Contemporary Monetary Theory and Financial Institutions (3)

ECO 530 Economics and Public Policy (3)

FIN 544 Investment Analysis and Portfolio Management (3)

Executive/General Business

9 semester hours

Required:

Nine semester hours of specific M.B.A. courses and with prior written consent of M.B.A. director

Management

9 semester hours

Required:

MGT 521 Organizational Development (3)

MGT 551 Management Decision Making (3)

MGT 587 Special Topics in Management (3)

See department sections for course descriptions.

Admission Requirements

M.B.A. applications are processed throughout the year.

Applicants must submit to the Office of Graduate Studies and Sponsored Research all undergraduate transcripts demonstrating high-quality performance at the undergraduate level; appropriate scores from the Graduate Management Admissions Test; an essay on career plans; a current resume; and two letters of recommendation. Registration for M.B.A. courses must be approved by the M.B.A. director.

In addition to the TOEFL requirement of 550, international M.B.A. applicants, upon acceptance and arrival on campus, will be interviewed by a representative of the English as a Second Language (ESL) Program for a review of their English language-speaking skills. For those students requiring additional study, a remedial program will be recommended and required as a part of their initial M.B.A. studies.

Degree Candidacy

For degree candidacy approval, students must maintain a minimum cumulative Grade Point Average (GPA) of 3.0 in all M.B.A. courses and a 3.0 GPA in concentration courses, be fully matriculated, and have completed all foundation courses.

Graduation Requirement

Students must maintain a minimum cumulative GPA of 3.0 in all M.B.A. courses and a 3.0 GPA in concentration courses.

Accounting

Prof. Galbraith, Chairperson (610-436-2236)

PROFESSORS

Charles H. Mott, Ph.D., American University Ali Naggar, Ph.D., University of Oklahoma

ASSISTANT PROFESSORS

Clyde J. Galbraith, M.B.A., *Drexel University* Carl M. Smith, M.B.A., *Temple University*

COURSE DESCRIPTIONS ACCOUNTING Symbol: ACC

500 Financial Accounting (3) A study of financial statements and financial accounting valuation for assets, liabilities, stockholders' equity, income, and expense. For those students admitted to M.B.A. studies without the previous course work in accounting; is equivalent to two undergraduate courses. Normally offered in summer only.

501 Managerial Accounting and Control (3) A course in advanced managerial accounting, focusing on accounting methods and techniques

useful in making business decisions. Included are measurements of divisional performance, revenue and pricing decisions, product decisions, and capital budgeting. Control systems and techniques are examined from a managerial perspective. Required core course. PREREQ: ACC 500 or undergraduate equivalent.

510 Current Accounting Concepts (3) Financial accounting with primary emphasis on current professional accounting principles and practices. Topics to be covered include income determination, asset valuation, and financial statement evaluation. This course will provide a bridge from theory to practice. PREREQ: ACC 501.

520 Accounting Information Systems (3)

Theoretical and practical aspects of the development and management of accounting information systems in businesses and other organizations. Development of a general model for use in system design and evaluation with subsequent study focusing on practical applications of the model using case studies and computer-related projects. PREREQ: ACC 501.

530 Accounting Planning and Research (3) Development of alternative strategies used by business management to minimize the impact and amount of income tax liability of the firm. Topics to be covered include tax planning, current tax regulations, and related complex taxation problems and issues. PREREQ: ACC 501.

Economics

Dr. Bove, Chairperson (610-436-2134)

PROFESSORS

Philip DeMoss, Ph.D., Kansas State University Tahany Naggar, Ph.D., University of Oklahoma Patrick J. M. Sylvester, Ph.D., Bryn Mawr College

ASSOCIATE PROFESSORS

Cynthia D. Benzing, Ph.D., *Drexel University*Roger E. Bove, Ph.D., *Harvard University*Daniel Mohan, Ph.D., *Rutgers—The State University*

ASSISTANT PROFESSORS

Kevin Dunleavy, Ph.D., *Duke University* Thomas W. Tolin, Ph.D., *University of Houston*

COURSE DESCRIPTIONS ECONOMICS

Symbol: ECO

501 Fundamentals of Economics (3) An introduction to the economic way of thinking, consumer behavior and business decision making, market structure and antitrust policy, energy and the environment, national income analysis, monetary and fiscal policy, economic growth, and international trade. Intended for those students with no previous course work in economics; is equivalent to two undergraduate courses. Normally offered in summer only.

502 Fundamentals of Statistics for Business Economics (3) Frequency distributions, random variables, probability theory and models, estimation theory, hypothesis testing, analysis of variance, regression and time-series analysis. Intended for those students with no previous course work in statistics. Normally offered in summer only.

503 Economic Role of Women (3) Statistics indicate that one of the most important changes in the American economy in this century is the increase in the number of working women. Jobrelated aspects, such as the historical pattern, labor force participation, education, earnings, labor supply, and sex discrimination will be examined.

PREREQ: ECO 501 and ECO 502.

510 Applied Econometrics (3) Analysis of multivariate models, determination of trends, oscillation, and periodic movements. Topics include remedies for auto-correlation and multicollinearity; dummy variables; distributed lags, forecasting and simulation; and alternative estimation techniques, such as two-stage least squares, three-stage least squares, and maximum likelihood estimators. PREREQ: ECO 501 and ECO 502, or their undergraduate equivalent.

525 Contemporary Monetary Theory and Financial Institutions (3) This course enhances the student's capability to analyze the interrelationships between aggregate economic activity, financial markets, and central banking instruments, objectives, and policy. Topics relate to demand for financial assets. PREREQ: ECO 501.

530 Economics and Public Policy (3) The principles and methods of economic analysis are used to evaluate the American economic system. Inflation, recession, and economic growth; problems of public finance and taxation; public policy regarding the concentration of economic power. PREREQ: ECO 501.

547 Managerial Economics (3) Development and application of a set of advanced micro-macro economic concepts to serve both as a source of

theoretical structure and unification of other business sciences. Emphasis will be given to topics such as risk analysis, linear programming, and capital budgeting. Required core course. PREREQ: ECO 501 and ECO 502 or undergraduate equivalents.

FINANCE Symbol: FIN

501 Financial Management (3) Theory and practice of managerial finance, with emphasis on analysis and understanding of the financial consequences of managerial decisions. Topics include financial statements, capital budgeting, working capital, and special contemporary concerns, such as small business finance. Required core course. PREREQ: ACC 500, ECO 501, and ECO 502, or undergraduate equivalent.

544 Investment Analysis and Portfolio Management (3) Introduction to investments, including examination of why and how individuals invest. This course provides an overview of the process by which an individual seeks out and synthesizes information about investment opportunities in order to make decisions to add to, maintain, or delete assets from an investment portfolio. Special attention is directed to the risk and return of assets. PREREQ: FIN 501.

Management

Dr. Chu, Chairperson (610-436-2649)

PROFESSOR

Hung M. Chu, Ph.D., Louisiana State University

ASSOCIATE PROFESSORS

Charles H. McGee, Ph.D., Northwestern University

Rani G. Selvanathan, Ph.D., University of Delhi, University of Paris

Roberta Snow, Ph.D., University of Pennsylvania

ASSISTANT PROFESSORS

James W. Hamilton, M.B.A., *Northeastern University* Evan Leach, Ph.D., *Yale University* Anne P. Murphy, M.B.A., *University of Pennsylvania*

COURSE DESCRIPTIONS MANAGEMENT

Symbol: MGT

- 500 Fundamentals of Management (3) This course provides the conceptual foundation in management theory, principles, and practices for the more advanced courses required for the M.B.A. Intended for those students with no previous course work in management. Normally offered in summer only.
- 511 Management and Organization Theory (3) An examination of management functions and managerial processes from a systems perspective. This course traces the evolution and development of management and organization principles and theories, with emphasis on the development of a framework for analysis of managerial problems and opportunities in both private and public sectors. The relationship between the individual and the organization, and topics such as leadership, communications, motivation, and decision making will be explored. Successful mastery of topics covered in a traditional principles of management course will be assumed. Required core course. PREREQ: MGT 500 or undergraduate equivalent.
- 513 Business and Society (3) The context and environment in which business organizations operate with specific attention to the social, ethical, political, and legal dimensions of an organization's external environment. Value assumptions, means-ends relationships, and policy ramifications of the constraints and opportunities inherent in the environment will be examined in depth. A managerial perspective will be developed to build a framework for macro-level trade-offs among and between competing economic, social, ethical, political, and legal forces and goals. Students must master all foundation areas prior to admission to this course.
- 521 Organizational Development (3) Interpersonal relations, intra- and intergroup relations, and the leadership role and function in the management of organizational development, change, conflict, and productivity. Primary focus will be on organizational development as an intervention strategy aimed at changing and improving organizational climate and performance. Organizations will be viewed as sociotechnical systems interacting with both internal and environmental forces. PREREQ: MGT 511.
- 531 Human Resources Management (3) The managerial implications of the human resources management and personnel administration functions. Topics include forecasting and planning of staffing requirements,

- recruitment, selection, allocation, evaluation, and development of the human resources of an organization. Lectures, class discussions, and case materials will be used. PREREQ: MGT 500 or undergraduate equivalent.
- 541 Production and Operations Management (3) Effective formulation and solution of problems in the acquisition of productive resources by the firm, their configuration into a productive system, and their utilization in producing goods and services. This course focuses on operational rather than strategic aspects, using quantitative techniques in the areas of demand forecasting, production and capacity planning, transportation facilities layout and job design, inventory control, quality control, waiting line problems, and scheduling. Students must master all foundation areas prior to admission to this course.
- 551 Managerial Decision Making (3) The course provides technical enrichment, including an exposure of various types of decision-making techniques for a prospective specialist in decision science. Situations examined will include distribution, resource allocation, project scheduling, congestion in service system, decision support systems, and artificial intelligence. PRE-REQ: MGT 511
- 560 Business Communications (3) The theory and practice of effective personal and organizational communications; development of managerial skills in verbal and written communications for a variety of media and forums; and practical experience in the delivery of management-oriented oral presentations and written papers. Particular attention will be paid to identifying and overcoming barriers to effective communication and insight. Required core course.
- 561 International Business (3) Examination of the problems of management, marketing, and finance when developing and engaging in international business. Attention to the formulation of alternative strategies for developing international business enterprises, the impact and consequences of implementing various alternative strategies for traditional business functions, problems of the multinational firm, and the special challenges of doing business with or in underdeveloped countries. PREREQ: MGT 511 and MKT 501.
- 571 Small Business Entrepreneurship (3) An interdisciplinary course on starting and managing a small business. Topics include the role of entrepreneurship in our economy and society, identifying and exploring opportunities, feasibility studies, legal structure, raising venture capital, and organization structure. Case studies and outside speakers will be used extensively. PREREQ: MGT 511.

- 573 Management of Small Business Enterprises (3) The operation of an on-going small business enterprise, Topics include forecasting, budgeting, inventory control, pricing, promotion, and record keeping. The roots of failure and success of small business enterprises will be examined. Selected guest speakers will share their views and experiences with students on pertinent topics. Cases and outside readings will be used to broaden students' exposure to small business management issues. PRE-REQ: MGT 511.
- 575 Field Studies in Small Business Management (3) This course provides students with the opportunity to work on a consulting project for a small business firm. Teams of two to four students are assigned to each small business client requesting management counseling. Depending on expertise and past experience, the teams will work on interdisciplinary projects involving market research, budgeting, record-keeping systems, pricing, and promotion. This course is sponsored by the West Chester University Small Business Institute. PREREQ: MGT 571 and 573.
- 587 Special Topics in Management (3) A seminar or independent study course providing exposure to current literature and discourse on selected issues in management. Includes an individual research project treating a complex management issue from an interdisciplinary, policy-level perspective. Parallel seminar discussions with peers, the instructor, and with outside experts will provide a sounding board for hypotheses formulation and testing. Extensive exposure to professional journals will be required in order to enhance familiarity with contemporary advances in theory and practice. PREREQ: Completion of three or more core courses.
- 599 Strategic Management (3) An in-depth examination of the processes by which business strategies are conceived, formulated, executed, and changed. Specific topics include strategic planning, endogenous and exogenous influences affecting strategic feasibility, analyses, and choices. Comprehensive strategy-oriented cases from a variety of business contexts are used. Should be taken in student's final semester. Required core course. PREREQ: Completion of all M.B.A. core courses.

MANAGEMENT INFORMATION SYSTEMS Symbol: MIS

501 Business Information Systems (3) A blending of theory, case studies, and personal computer applications to the solution of business information problems. Students will gain insight into functional and strategic implications of information resources, technology, and systems.

Marketing

Dr. Redington, Chairperson (610-436-2363)

ASSOCIATE PROFESSORS

John R. Morgan, Ph.D., Temple University John T. Redington, Ph.D., Pennsylvania State University

ASSISTANT PROFESSORS

Paul F. Christ, M.B.A., Temple University John E. Gault, M.B.A., *University of Pennsylvania* Sandra M. Tomkowicz, J.D., *University of Pennsylvania*

COURSE DESCRIPTIONS LAW

Symbol: BLA

501 Legal Environment of Business (3) An indepth examination of legal issues for business organizations, including constraints and opportunities. Primary attention will be given to an intensive exploration of the law as it affects business contracts, sales, commercial paper, and the formation and operation of a business entity from the perspective of the manager. This course is designed to meet the professional needs of managers who have minimal exposure to the law

and to enhance their knowledge of the legal ramifications of business operations.

MARKETING

Symbol: MKT

500 Principles of Marketing (3) An introduction to marketing. Selection of target markets, developing marketing mixes, decision making, planning, implementation, and monitoring of marketing programs. Intended for students with no previous course work in marketing. Normally offered in summer only.

501 Marketing Management (3) An analytical approach to the study of marketing, focusing on the total environment in which marketing decisions are made. Emphasis is on planning the marketing effort and integrating it into the total operation of an organization; i.e., managing the marketing function. Familiarity with topics covered in a traditional principles of marketing course will be assumed. Required core course. PREREQ: MKT 500 or undergraduate equivalent.

Chemistry

Room 154 Schmucker Science Center II West Chester University West Chester, PA 19383 610-436-2631

Dr. Ghoroghchian, Chairperson

Dr. Ahmad, Coordinator of Graduate Studies

Dr. Fenton, Director of Clinical Chemistry

PROFESSORS

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ASSOCIATE PROFESSORS

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ASSISTANT PROFESSORS

James Falcone, Ph.D., University of Delaware Blaise Frost, Ph.D., University of South Dakota

Programs of Study

The Department of Chemistry offers a program leading to the Master of Science in chemistry, Master of Science in clinical chemistry, and Master of Education in chemistry. It also cooperates with the Department of Geology and Astronomy in offering a program leading to the Master of Arts in physical science. (See a description of the Physical Science program.)

MASTER OF SCIENCE IN CHEMISTRY

Admission Requirements

In addition to meeting the general requirements for admission to a degree program at West Chester, applicants must present an undergraduate background that includes mathematics through calculus, one semester of analytical chemistry, and full-year courses in organic chemistry and physical chemistry.

Degree Requirements

- 1. Before admission to degree candidacy, each student is required to pass three qualifying examinations in the five major areas of chemistry (inorganic, analytical, physical, organic, and biochemistry). The student may select up to four areas. If necessary, the examinations in each area may be retaken once. The student may be required to enroll in appropriate undergraduate courses for no credit in order to prepare for a re-examination. These examinations must be passed before admission to degree candidacy, i.e., prior to the attainment of 15 graduate credits.
- At the discretion of the department chairperson, Graduate Record Examination scores may be required for purposes of evaluation and guidance.

- 3. Reading proficiency is required in any one of the following modern languages: German, French, or Russian. The reading test is administered by the Department of Foreign Languages. In place of the modern-language proficiency, a demonstrated proficiency in a computer language (FORTRAN, for example) may be substituted.*
- 4. The candidate must perform successfully on an oral examination, which is required for Options A, B, and C listed below. The oral examination will include general chemistry knowledge but will place emphasis on the area represented by independent study or the research report. The members of the examination committee include the research supervisor, the departmental graduate coordinator, and two other professors.

Program for the Master of Science in Chemistry

The M.S. in chemistry program consists of a required core of 15 semester hours and a chemistry elective area for which there are three options. (See the description of each option for the total semester hours required.) All students must complete the core, composed of CHE 511, 531, 540, or 543, and any two of the topics courses (CHE 515, 525, 533, 544, 551, or 575). One semester of CHE 591 must be taken.

Option A (30 semester hours)

This is the thesis program. Beyond the core, the candidate takes Thesis (CHE 610) for three credits, Research in Chemistry (CHE 580) for three credits, and seven semester hours of electives.

Option B (33 semester hours)

Beyond the core, this option requires Research in Chemistry (CHE 580) for six credits and 10 semester hours of electives.

Option C (36 semester hours)

Under this plan, the student completes core requirements and an elective area of 19 semester hours that must include three credits in Research in Chemistry (CHE 580).

Under all options, the elective area is developed under advisement from chemistry offerings but may include three semester hours from another science area or from mathematical sciences.* Until admitted to degree candidacy, students may not undertake independent study.

MASTER OF SCIENCE IN CLINICAL CHEMISTRY

Admission Requirements

An applicant must meet the general requirements for a degree program at West Chester University and must hold a bachelor's degree in chemistry, medical technology, or a closely related field.

Course prerequisites for admission include one semester each of analytical chemistry, biochemistry, physics, clinical chemistry, clinical chemistry laboratory, and physical chemistry. Two semesters of organic chemistry and mathematics through calculus also are required. Several of the above courses may be waived if the applicant has graduated from a four-year nationally certified medical technology program. Students who do not meet program prerequisites may take required courses upon enrollment. Graduate Record Examination scores may be required prior to acceptance.

Degree Requirements

1. Before admission to candidacy, each student must pass a comprehensive examination covering the areas of biochemistry, clinical chemistry, and analytical chemistry. This examination is usually administered after one-half of the student's course work is completed. If necessary, this examination may be retaken once.

^{*}A computer science course taken to satisfy the foreign language requirement will not be counted as an elective toward the degree.

2. The candidate must perform successfully on an oral examination, which is required for all program options. The oral examination will include general chemistry knowledge but will place emphasis on the area represented by independent study or the research report. The members of the examination committee include the research supervisor, the departmental graduate coordinator, and two other professors.

Program for the Master of Science in Clinical Chemistry

The program consists of a required core of 20 semester hours. Additional credits needed for the degree may be pursued under three options.

Core, courses: ADM 505, CHE 524, 548, 555, 579, 582, 583 (CHE 550, Clinical Chemistry Internship, is also required of students who lack previous clinical laboratory training.)

Option A (36 semester hours)

Core, plus CHE 580 (Research in Chemistry), plus 13 semester hours of electives from chemistry, biology, physics, mathematics, computer science, or administration.

Option B (30 semester hours)

Core, plus four semester hours of electives, plus three credits of thesis (CHE 610) and three credits of Research in Chemistry (CHE 580).

Option C-Master of Science in Clinical Chemistry and Certificate in Administration (38 semester hours)

Chemistry core, plus three semester hours of CHE 580, plus core from the graduate administration program. The student minors in administration and receives the M.S. degree, in addition to the Certificate in Administration.

MASTER OF EDUCATION IN CHEMISTRY

Admission Requirements

In addition to meeting the general requirements for admission to a degree program at West Chester University, applicants must present an undergraduate background, including mathematics through

calculus and 24 semester hours of undergraduate chemistry.

At the discretion of the department chairperson, Graduate Record Examination scores may be required for evaluation and guidance.

Degree Requirements

- 1. If academic or professional performance is less than satisfactory during the precandidacy period, the student may be required to enroll in an appropriate undergraduate course.
- 2. Successful performance on a comprehensive oral examination given upon completion of the program.
- 3. Successful completion of the program outlined below.

Program for the Master of Education in Chemistry (34 semester hours)

The M.Ed. in chemistry program consists of professional education requirements and area concentration requirements as outlined

Professional Education Requirements (See pages 47-48.)

0-12 semester hours

Area of Concentration

20-22 semester hours 15 semester hours

A. Required

CHE 511 Advanced Inorganic Chemistry I (3)

CHE 524 Analytical Chemistry II (3)

Organic Reaction Mechanisms (3) CHE 531

CHE 540

Chemical Thermodynamics (3)

(CHE 543 may be taken in place of CHE 540.)

Modern Trends in Science Education (3) SCE 500

Electives, under advisement (5-7)

Electives (Professional or Academic) (0-4) MASTER OF ARTS IN PHYSICAL SCIENCE See Physical Science.

COURSE DESCRIPTIONS CHEMISTRY

Symbol: CHE unless otherwise shown. CRL indicates laboratory.

- ♦ 505 Fundamental Topics in Chemistry (2-6) Basic level elective courses in chemistry for professional growth. (Not for M.S. in chemistry.) PREREQ: General chemistry.
- 509 Descriptive Inorganic Chemistry (3) The emphasis of this course is on periodic properties of the representative elements, the structure of inorganic solids, the chemistry of aqueous and nonaqueous solutions, and the study of some transition metals. Lathanides and actinides also are studied. (Not for M.S. in chemistry.) PREREQ: CHE 103/104.
- 511 Advanced Inorganic Chemistry I (3) Structure and properties of the elements and their compounds from a theoretical point of view; the periodic law, acids and bases, structure and reactivity of metal compounds and main group compounds. PREREQ: CHE 341.
- ♦ 515 Topics in Inorganic Chemistry (3) Topics of current interest in inorganic chemistry. Topic
- ♦ This course may be taken again for credit.

to be announced prior to registration.

- 517 History of Chemistry (1) The history of chemistry and its predecessors from ancient times to the present.
- 518 Literature of Chemistry (1) Instruction in the use of a modern chemical library, reference and data acquisition, synthetic procedures, and computer data bases. PREREQ: CHE 231.
- 519 Ethics and Human Values in Science (1) A one-semester course for science majors to acquaint students with potential ethical problems in their professional careers.
- 524 Analytical Chemistry II (3) Basic principles of applied instrumental analysis. Special emphasis on the use of spectrophotometric, electroanalytical, and chromatographic instrumentation. PREREQ: CHE 321 and CHE 341.
- CRL 524 Analytical Chemistry II Laboratory (2) Practical experience in the choice and application of instrumental methods to chemical systems. CONCURRENT OR PREREQ: CHE 524.
- ♦ 525 Topics in Analytical Chemistry (3) Indepth examination of current topics in instrumental or wet chemical analysis. Special emphasis on state-of-the-art development and applications. Topic announced prior to registration.

- CRL 527 Electron Microscopy I (3) (See ESL 527.)
- CRL 529 Electron Microscopy II (3) (See ESL 529.)
- 531 Organic Reaction Mechanisms (3) Theoretical treatment of selected organic reactions. Emphasis on bonding theory, structural relationship, equilibria, and free-energy relation-
- ♦ 533 Topics in Organic Chemistry (3) Topics of current interest in organic chemistry. Topic announced prior to registration.
- 535 Qualitative Organic Analysis (5) Identification of pure organic compounds and mixtures of organic compounds using classical and modern instrumental techniques. Laboratory included.
- 536 Polymer Chemistry (3) Polymerization kinetics, rheology of polymer melts, crystallization parameters, and monomer reactivity in copolymer-
- CRL 536 Polymer Chemistry Laboratory (2) A course designed to introduce the advanced student to the synthesis of polymers and the study of the molecular, physical, and thermal properties

- of these compounds. PREREQ: CHE 232/CRL 232. COREQ: CHE 536.
- 540 Chemical Thermodynamics (3) Laws and functions of thermodynamics and their applications: introduction to statistical thermodynamics.
- 543 Quantum Chemistry (3) Basic quantum chemistry, including the hydrogen atom problem, chemical bonding, spectroscopic concepts, and group theory.
- ♦ 544 Topics in Physical Chemistry (3) Topics of current interest in physical chemistry. Topic announced prior to registration.
- 548 Clinical Biochemistry (3) A one-semester course on the biochemical basis of disease. Case histories are discussed with emphasis on the clinical interpretation of laboratory data. PREREQ: CHE 581.
- 550 Internship in Chemistry (3-6) A full- or part-time work study appointment in a hospital, commercial, governmental, or industrial laboratory supervised jointly by an on-site supervisor and a chemistry department faculty member. PREREQ: Permission of the department internship committee.
- 555 Quantitative Clinical Methods (3) A course on the mathematical aspects of clinical laboratory science. Statistics and laboratory uses for computers are stressed. PREREQ: CHE 581.
- CHE 560 Advanced Organic Spectroscopy (3) An advanced course in organic spectroscopy dealing with IR, NMR, and MS techniques. PREREQ: CHE 531.
- 571 Fundamentals of Biochemistry (3) Structure and chemistry of proteins and nucleic

- acids; molecular biology, physio-chemical methods for biomacromolecules, enzymes, and the molecular basis for some physiological phenomena. Lab: CRL 571. PREREQ: Physical chemistry.
- CRL 571 Experimental Biochemistry (2) Laboratory exercises in the fundamentals of biochemistry. CONCURRENT OR PREREQ: CHE 571
- 575 Topics in Biochemistry (3) Topics of current interest in biochemistry. Topic announced prior to registration.
- 576 Biochemistry 1 (3) A two-semester course in biochemistry. The first part shows how the chemistry of amino acids, proteins, enzymes, carbohydrates, lipids, and membranes enables living organisms to perform biological functions. PREREQ: CHE 232 and physical chemistry.
- 577 Biochemistry II (3) The second part of biochemistry covers the biosynthesis of diverse molecules, DNA structure and function, and molecular physiology, including immunoglobulins, hormones, nutrition, and nerve action. Chemistry will be related to normal and pathological biological functions. PREREQ: CHE 576.
- 579 Chemical Toxicology (3) A one-semester course in the basic principles of toxicological analysis. Special emphasis will be placed on documentation, sampling, and verification of laboratory materials and results. The environmental and physiological aspects of chemical toxicity will be explored.
- CRL 579 Chemical Toxicology Laboratory (2) A one-semester course in the basic principles of toxicological analysis. CONCURRENT OR

- PREREQ: CHE 579.
- ◆ 580 Research in Chemistry (3-6) Independent research in chemistry, under the direction of a member of the chemistry faculty.
- 581 Clinical Chemistry (3) Analysis of biological fluids. Clinical significance of enzyme, electrolyte, protein, and carbohydrate analysis. Requires permission of instructor or undergraduate preparation in organic chemistry and quantitative analysis. CONCURRENT OR PREREQ: CHE 571; PREREQ: CHE 321.
- 582 Advanced Clinical Chemistry (3) A onesemester course with emphasis on recent advances in testing modalities, instrumentation, and methodologies in clinical chemistry. PREREQ: CHE 571 and 581.
- 583 Clinical Chemistry Seminar (2) A course emphasizing the recent literature in clinical chemistry. Student lecture presentations and round table discussions are used. PREREQ: CHE 581.
- 591 Seminar (2) Topics of current interest in chemistry.
- *610 Thesis (3)
- SCC 570 Science and Human Values (3) Not for M.S. in chemistry.
- ♦ This course may be taken again for credit.

 *Graduate students beginning their research program should enroll in CHE 580, which may be repeated. Students should enroll in CHE 610 during their last semester. Only under rare circum-

stances may CHE 610 be repeated.

Childhood Studies and Reading

105C Recitation Hall 610-436-2944

Dr. Maggitti, Chairperson

Dr. Bollin, Graduate Coordinator for Elementary Education Programs

Dr. Kletzien, Graduate Coordinator for Reading Programs

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Programs of Study

The Department of Childhood Studies and Reading offers graduate programs in the following areas: certification in elementary education; certification as a reading specialist; a Master of Education in elementary education; a Master of Education in reading; and a Certificate of Advanced Graduate Study. Courses are available to teachers desiring permanent Pennsylvania elementary certification.

On June 1, 1987, the Pennsylvania State Board of Education implemented revisions to the Pennsylvania School Code. These revisions require all students who apply for Pennsylvania teaching certificates to pass state competency tests in basic skills, general knowledge, professional knowledge, and specific knowledge of the subjects in which they seek teacher certification. Students also must demonstrate that they have met the requirement for computer literacy.

As changes are made in requirements for elementary certification and reading specialist certification, it is the student's responsibility to satisfy the new requirements.

After the student's application has been submitted to West Chester University's Office of Graduate Studies and Sponsored Research and appropriate transcripts have been received, the student will be mailed information regarding the program and advisement.

Elementary Education

Through programs in elementary education, the department offers the Master of Education degree in elementary education, as well as nondegree programs for teachers seeking professional growth and/or credit certification.

Admission Requirements

1. Applicants to both the degree and the certification programs are expected to have an undergraduate degree from an accredited college or university. In addition, they must meet an undergraduate grade point average (GPA) entry requirement of 3.0 on a scale of 4.0.

Applicants who cannot meet this requirement must take either the Miller Analogy Test (MAT) or the Graduate Record Examination (GRE). A satisfactory score as determined by the department on the GRE (verbal and quantitative sections) or MAT will demonstrate a student's academic competence in lieu of the required GPA. Applicants to the degree program must possess initial teacher's certification.

- 2. Within the precandidacy period (the first 12-15 semester hours), the applicant must:
 - a. Complete EDF 500 (or 501, 502) and two EDE courses.
 - b. Maintain a cumulative GPA of 3.0.

Please refer also to "Degree Candidacy and Degree Requirements" under "Academic Information and Requirements."

3. Students applying for the certification program should be aware that a limited number of spaces are available in the program. Some students who meet the minimum requirements may not be admitted due to this space limitation.

Degree Requirements

- Satisfactory completion of the curriculum as given below. Both
 the selection and the sequence of courses should be determined
 in consultation with the appointed adviser. Only six credits of
 workshops are permitted.
- 2. A cumulative GPA of at least 3.0. (NOTE: All courses specific to elementary education are included in computing the GPA in elementary education. Examples of such courses are ENG 592 and MTE 554.)
- 3. Satisfactory performance on the comprehensive examination.

The Comprehensive Examination

In order to become eligible for the examination, the student must:

- 1. Be a degree candidate.
- 2. Complete at least 28 semester hours, including all required courses, by the end of the semester preceding the examination.
- 3. Maintain an average GPA of 3.0.

The examination is given on the first Saturday in February, the first Saturday in October, and the last Saturday in pre-session, unless otherwise announced by the department.

Applications for admission to the comprehensive examination are available from the department and must be filed by July 10 for the October examination, December 1 for the February examination, and May 1 for the pre-session examination. A candidate who fails the

comprehensive examination is permitted to take one re-examination within a two-year period. Failure of the re-examination will result in a comprehensive review of the student's graduate record, followed by a determination of the candidate's future status by the departmental graduate committee.

MASTER OF EDUCATION IN ELEMENTARY EDUCATION

This may consist of either a nonthesis program requiring 33 semester hours, or a thesis program requiring 30 semester hours.

In either option, the candidate must meet a professional education requirement, including EDF 500 (or EDF 501 or EDF 502), EDF 510 or EDF 589, and EDP 550. Also required in either option is an elementary education area consisting of EDE 548, 549, 553, and an elective in reading or elementary education. Successful completion of the comprehensive exam is a requirement for both the nonthesis and thesis programs.

During the first session of enrollment, the student confers with an assigned adviser to determine an appropriate and desirable area of concentration. The remainder of the program will be developed within the selected concentration. The choice of concentrations may be made from areas offered by the Department of Childhood Studies and Reading or areas offered by other departments.

Nonthesis Program (33 semester hours)

I. Professional Education

9 semester hours

EDF 500 Methods and Materials of Research in Education (or EDF 501, 502) (3)

EDF 510 Educational Foundations (3) or

EDF 589 Sociological Foundations of Education (3)

EDP 550 Advanced Educational Psychology (3)

II. Elementary Education

12 semester hours

EDE 548 Curriculum Theory and Trends in Elementary Education (3)

EDE 549 Theory and Trends in the Language Arts (3)

EDE 553 Child Development and Behavior II (3)

(These three courses should be taken after completion of 15 hours of course work.)

Elective in Reading and/or Elementary Education (3)

III. Area of Concentration

12 semester hours

The 21 credit hours above are required of all degree candidates. The remaining 12 credits are to be concentrated in one of the following areas, to be selected under advisement during the first session of enrollment:

Courses offered within the department. Advising by assigned adviser.

Creative Teaching-Learning
Early Childhood Education
Elementary Education (General)
Gifted and Talented

Human Development Language Arts Reading Social Studies

Courses offered in other departments. Advisement for area of concentration by selected faculty in respective department.

Bilingual Education Children's Literature

Special Education
Writing

Mathematics

Thesis Program (30 semester hours)

Students who wish to pursue the thesis program must consult with the department chairperson, or his or her designee, not later than the second session of enrollment.

Reading

Through its graduate reading program, the School of Education offers the Master of Education degree with a major in reading, and Reading Specialist Certification. Students who complete either program are recommended for Pennsylvania certification as a reading specialist. These programs prepare candidates to serve in special reading positions and as classroom teachers of reading in elementary or secondary schools.

Admission Requirements

- 1. Applicants are expected to have an undergraduate degree from an accredited college or university. In addition, they must meet an undergraduate grade point average (GPA) entry requirement of 3.0 on a scale of 4.0.
 - Students who cannot meet this requirement must take either the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE). A satisfactory score as determined by the department on the GRE (verbal and quantitative sections) or MAT will demonstrate a student's academic competence in lieu of the required GPA. Applicants must possess initial teacher's certification.
- 2. The student must possess an Instructional I Certificate.
- Courses required within the precandidacy period are EDF 500;
 EDR 510, 514, 516; and one additional course from the prescribed program.
- 4. Students must maintain an overall GPA of 3.0 during the precandidacy period.

Degree Requirements

In addition to meeting degree requirements of the University, the candidate must:

- Successfully complete the reading curriculum and any additional courses that may be required by the reading faculty. Workshops will not be accepted to satisfy this requirement.
- 2. Achieve an overall GPA of at least 3.0.
- Perform satisfactorily on the comprehensive examination in reading. Students are responsible for meeting all requirements by the specified time.

The Comprehensive Examination

Students are eligible for the comprehensive examination when they have completed all prescribed work and been recommended by the adviser. The examination is given the first Saturday in February and the last Saturday in pre-session. Application for the examination must be made in writing to the graduate coordinator for the February examination by December 1, and by May 1 for the pre-session examination.

Candidates who fail the comprehensive examination are permitted one re-examination within a two-year period. Candidates who fail the re-examination are dropped from the degree program.

MASTER OF EDUCATION IN READING

(36 semester hours)

 Professional Education Requirements 6 semester hours EDF 500 Methods and Materials of Research in Education (3) or

EDF 501 Methods and Materials of Research for Elementary Education (3)

Plus:

EDF 510 Educational Foundations (3)

- II. Reading Education Requirements 27 semester hours
 - EDR 510 Foundations of Reading Instruction: K-12 (3)
 - EDR 514 Reading in the Content Areas (3)
 - EDR 515 Teaching Reading with Children's and Adolescents' Literature (3)
 - EDR 516 Reading Disabilities (3)
 - EDR 517 Current Practices in Teaching Developmental and Corrective Reading (3)
 - EDR 519 Teaching Reading to Culturally Diverse Students (3)
 - EDR 521 Reading Clinic Practicum and Seminar I (3)
 - EDR 522 Reading Clinic Practicum and Seminar II (3)
 - EDR 541 Organization and Operation of Reading Programs: K-12 (3)
- III. Area of Electives

3 semester hours

Selected, under advisement, from:

EDA 571

EDE 522, 543, 548, 549, 551, 553, 555, 560

EDR 523, 526, 540, 542

All students *must* complete a course in child and adolescent development. Any student who enters the program without having completed such a course at the undergraduate or graduate level should take EDE 551 as an elective.

READING SPECIALIST CERTIFICATION

(30 semester hours)

Requirements for the certification program:

- 1. The student must possess an Instructional I Certificate.
- 2. Courses required within the first 15 hours are EDR 510, 514, 516, and 517.
- 3. The student must maintain an overall GPA of 3.0.
- 4. In order to obtain the certificate, the student must successfully complete the Master of Education in reading program, except that the student is not required to take the two courses in professional education. Workshops will not be accepted to satisfy this requirement.
- 5. The student must perform successfully on the competency examination.

Certificate of Advanced Graduate Study (CAGS)

The Certificate of Advanced Graduate Study (CAGS) is designed for students who already possess a master's degree and who want to expand their knowledge in a given area, or to broaden it to include other areas. Such students normally do not wish to undertake a doctoral program but, at the same time, prefer the guidance and structure offered by a program such as the CAGS.

Admission Requirements

A student who wishes to pursue the CAGS must:

1. Possess a master's degree from an accredited institution.

- 2. Have attained a minimum grade point average (GPA) of 3.0 in a master's degree program.
- 3. Present three professional letters of recommendation.

Acceptance for study toward the CAGS will be determined by the faculty of the Department of Childhood Studies and Reading. However, prior to formal admission to the program, the student is required to develop a proposed plan of study with the supervising committee (consisting of the major adviser and one additional member) that has been appointed by the department chairperson or a designee.

Program of Study

A minimum of 30 semester hours earned beyond the master's degree is required. Students accepted into the program will pursue a plan of study to meet their individual needs. Plans will be developed with the major adviser and be approved by the student's supervising committee. Previous course work taken will be considered in the development of the student's program. Also, the suggested program will be presented to the departmental graduate committee for approval. Course work may be arranged as follows:

- Area of Specialization 18-24 semester hours
 (Examples: Early Childhood Education, Elementary Education—
 General, Language Arts, Mathematics, Reading, Science, Social
 Studies, Gifted Education)
 Programs will be individually tailored for each student by an
 adviser.
- 2. Course Work in Complementary Areas
- 3. Seminar in Research
- 4. Research Report

- 0-6 semester hours
 - 3 semester hours
- 3 semester hours

Transfer Credits

A maximum of six hours of approved transfer credit earned after the master's degree may be applied to the proposed program if the courses complement the area of specialization and if the credits were earned within a period of three years before entering this program.

Certificate of Approval

Successful completion of the program requires that the student:

- 1. Achieves a minimum GPA of 3.25 in all course work in the area of specialization and a minimum GPA of 3.0 in all course work taken outside the School of Education.
- Successfully passes an oral examination in the area of specialization, as well as completes a research report. All requirements, including the research report, must be completed before the student will be allowed to take the oral examination.
- 3. Meets all program requirements.
- 4. Completes the program within six years following the date of the first enrollment.

COURSE DESCRIPTIONS EARLY CHILDHOOD AND ELEMENTARY EDUCATION Symbol: EDE

- 502 Introduction to Early Childhood Education (3) A basic course in early childhood education. Emphasis is on the historical and theoretical bases influencing education of young children.
- 503 Contemporary Influences in Early Childhood Education (3) Current factors that affect the educational needs of young children and classroom practices reflecting those influences.
- 504 Early Childhood Programs (3) Model programs in early childhood education, focusing on curriculum design and implementation in the preschool and primary years.
- 505 Seminar in Early Childhood Education (3) Selected problems in early childhood education. PREREQ: Permission of instructor.
- 506 Infant and Toddler Development and Environment (3) Physical, social, emotional, and intellectual development of the child newborn to two years is studied. The use of developmental tests for the diagnosis of infant and toddler needs is related to the structuring of an appropriate learning environment.
- 507 Preschooling Learning Environment (3) Methods and materials, developmentally appropriate for children 2–5, are presented. Readiness assessments, curricular discussions, and teaching approaches are addressed across the full spectrum of child development.
- 522 Teaching the Communication Skills (3) Strategies for teaching the language arts. Methods, materials, and resources for organizing creative programs in school settings.
- 530 Social Studies in Elementary Education (3) Interdisciplinary and multicultural strategies for developing concepts, skills, and values in the social studies program.
- 543 Creative Expression in the Elementary School (3) Theories and techniques to promote creative thinking and enhance children's creative potential in all areas of the school curriculum.
- 548 Curriculum Theory and Trends in Elementary Education (3) Theoretical frameworks of elementary school curricula; curriculum development

- and change. To be taken after 15 hours of work.Theory and Trends in the Language Arts
- (3) Analysis and evaluation of language arts programs, including reading in the modern elementary school. PREREQ: EDE 548.
- 551 Child and Adolescent Behavior I (3) Social, intellectual, emotional, physical, and moral aspects of child and adolescent behavior. Emphasis on personal development of the teacher as a prerequisite to understanding children in the elementary school.
- 552 The Middle School Child (3) Development, behavior, and specific needs during late childhood and early adolescence (10-15 years); applies to working with children in the middle school. PREREQ: Recent course in child/human development.
- 553 Child and Adolescent Behavior II (3) Review of principles of growth and development. Theories of personality development; clues to identifying children with problems; therapies applicable to elementary and adolescent school children. Case study may be required. PREREQ: A recent course in child development and completion of 15 hours of course work.
- 555 Self Development and Interpersonal Skills (3) Self development, interpersonal, and group communication skills. Focus on helping relationships in educational settings. PREREQ: Recent course in human development or the equivalent.
- 557 The Foundations of Cooperative Learning (3) Exploration of various theories, models, and strategies for cooperative learning, with a focus on the implementation of the Johnson and Johnson model of cooperative learning into all areas of the school curriculum.
- 560 Meeting Individual Needs of Children (3) Discovering each child's needs; providing for individualized learning; identifying problems and their solutions. PREREQ: Recent course work in elementary education and child development.
- 562 Integrating Thinking Skills into the Curriculum (3) Provides the rationale and theory base for including thinking skills in instructional strategies. Opportunities to apply thinking strategies to curricula are provided through models of teaching.

- 565 Effective Classroom Management (3) Dynamics of interpersonal relations in planning and facilitating classroom instruction.
- 570 Supervision in the Elementary School (3) Concepts and practices in supervision of teachers, student teachers, and aides. PREREQ: Course work in elementary education and child development.
- 580-589 Workshops in Elementary Education (1-6) Additional course numbers will be assigned as new areas of study are announced. Credits vary.

The series presently includes:

- 580 Workshop in Elementary Education
- 83 Workshop in Creativity
- 585 Workshop in Language Arts
- 586 Workshop in Curriculum Enrichment
- 588 Workshop in Gifted and Talented
- 589 Workshop in Humanizing Teaching and Learning
- 590 Independent Study (1) Enrollment by permission only; number of credits determined by instructor.
- 598 Workshop in Elementary Education (3) ECE 598 Workshop in Early Childhood
- 600 Research Report (1-2)
- 610 Thesis (4-6)

READING Symbol: EDR

Education (3)

- 510 Foundations of Reading Instruction: K-12 (3) Psychology and pedagogy of reading instruction. The nature of the reading process; the nature of the learner; skill development; instructional strategies.
- 514 Reading in the Content Areas (3) Reading skills, reading problems, teaching techniques, and reading activities in content subjects at the elementary and secondary levels. PREREQ: EDR 510 or permission of instructor.
- 515 Teaching Reading with Children's and Adolescents' Literature (3) Based on the philosophy that literature should be an integral element of reading programs. The emphasis is on fostering wide reading and response to literature in K-12 reading programs. Students will learn instructional strategies and develop materials and a selected bibliography. PREREQ: EDR 510 and 514.

- 516 Reading Disabilities (3) The nature of reading disability, and diagnosis and remediation of reading problems. PREREQ: EDR 510.
- 517 Current Practices in Teaching Developmental and Corrective Reading (3) Developmental and corrective reading instruction. Attention is given to diagnostic procedures and resulting appropriate instruction. PREREQ: EDR 510, 514, 516, 545, and either graduate or undergraduate credits in child and adolescent development.
- 519 Teaching Reading to Culturally Diverse Students (3) Historical, cultural, and educational contexts of literacy, language, and learning as they relate to reading instruction. PREREQ: EDR 516, 517, or permission of instructor.
- 521 Reading Clinic Practicum and Seminar I (3) A laboratory course in the diagnosis of reading difficulties. Major attention given to diagnosing corrective cases and writing case reports. PREREQ: EDR 517 and 519.

- 522 Reading Clinic Practicum and Seminar II (3) Continuation of EDR 521. Emphasis placed on developing specific skills and techniques for correcting various types of reading disability cases. PREREQ: EDR 521.
- 523 Reading as a Language Process (3) Basic concepts from areas of phonology, morphology, syntax, semantics, sociolinguistics, dialectology, and psychology will be related to the teaching of reading in grades K-12.
- 526 Emerging Literacy and Beginning Reading: A Whole Language Approach (3) Concerned with young children's literacy development from preschool through the primary grades. Emphasis on instructional recommendations and implementations for a range of abilities. Included are supervised one-on-one and/or small-group teaching experiences. PREREQ: EDR 510 or permission of instructor.
- 540 Seminar in Reading (3) Critical examination of trends, opinions, and current research in

- the teaching of reading. PREREQ: EDR 516 or permission of instructor.
- 541 Organization and Operation of Reading Programs: K-12 (3) Practical application of the reading specialist's role in organizing and operating K-12 reading programs. Emphasis on the use of the total school community in meeting individual reading needs. PREREQ: EDR 522 or permission of instructor.
- 542 Seminar in Reading Research (3) A seminar in the basic techniques and sources of research in reading. Exposure to significant research in the field. PREREQ: EDF 501 or permission of instructor.
- 590 Independent Study (1-6) Individual investigation and exploration of related reading research. Topic must be approved by the supervising instructor prior to registration.

Communication Studies

512 Main Hall West Chester University West Chester, PA 19383 610-436-2500

Dr. Klinzing, Chairperson Dr. Casagrande, Coordinator of Graduate Studies

PROFESSORS

Diane O. Casagrande, Ph.D., *Temple University*Anita K. Foeman, Ph.D., *Temple University*Dennis R. Klinzing, Ph.D., *Pennsylvania State University*C. Jack Orr, Ph.D., *Temple University*

ASSOCIATE PROFESSORS

Mary W. McCullough, Ph.D., *Temple University* Michael V. Pearson, Ph.D., *Temple University*

ASSISTANT PROFESSORS

Kevin W. Dean, Ph.D., University of Maryland Elaine B. Jenks, Ph.D., Pennsylvania State University Amy E. Martz, Ph.D., Pennsylvania State University Sara E. Newell, Ph.D., University of Utah Thomas G. Reed, Ph.D., Union of Experimental Colleges and Universities

Martin S. Remland, Ph.D., Southern Illinois University

Programs of Study

The M.A. in communication studies has two program options. The first is a 36-credit applied curriculum in which two courses, COM 501 and COM 502, are required, and 15 credits must be selected from among the communication studies offerings. An additional 15 credits of course work are selected to allow a focus on the application of communication to a specific area, such as administration, management, teaching, and training and development. This program is envisioned as a terminal degree that may provide the opportunity for practicing professionals to sharpen their skills or change careers. The program also should help those who have not yet entered the job market by increasing their competence in

communication and an applied area of their choice. The second option is a 30-credit thesis program that will provide students with the opportunity to develop the knowledge and skill needed to further research interests or to gain entry into Ph.D. programs in communication or related areas.

The courses offered in the M.A. in communication studies are graduate-level seminars that require fundamental knowledge of communication theory, research, and knowlege of scholarly methods of inquiry. Individuals who have earned a bachelor's degree in speech communication or communications in an accredited institution and who have maintained a B average or better should have the requisite knowledge and ability to be successful in the courses that comprise the program. Others, particularly those who have earned degrees in related fields such as English, psychology, and sociology, may be required to complete prerequisite undergraduate courses in communication based on an analysis of their undergraduate transcripts. Transcript analyses and possible prerequisites will, in all probability, be required for students who apply to the program with degrees in unrelated disciplines.

MASTER OF ARTS IN COMMUNICATION STUDIES

Admission Requirements

Students must meet general requirements for admission to graduate studies as well as the following department criteria that will determine either regular or provisional admission into the M.A. in communication studies.

- 1. Regular Admissions:
 - a. A Graduate Record Exam score of 1000 or greater, or a comparable score on the Miller Analogies Test.
 - b. Undergraduate GPA of at least 2.75 overall and in the undergraduate major.
 - c. Review of application to determine appropriateness of undergraduate preparation.
- 2. Probationary Admissions:
 - A Graduate Record Exam score of less than 1000 but greater than 850 or a comparable score on the Miller Analogies Test.

- b. Undergraduate GPA less than 2.75 but higher than 2.5 overall and in the undergraduate major.
- c. Review of application to determine appropriateness of undergraduate preparation.

Admission to Degree Candidacy

At the completion of 12 semester hours (at least nine of which are within the department), a B grade or better must be earned in each of those four courses in order for candidacy to be achieved.

Curriculum

- Courses for Nonthesis, Applied Curriculum (36 credits)
 - A. Required Core

 COM 501 Theoretical Perspectives (3)

 COM 502 Communication Research Methods (3)

 15 credits selected from departmental offerings
 - B. Applied Courses 15 credits
 These courses are to be selected from other departments or

from communication studies courses. A six-credit graduate internship (COM 598) may be elected upon successful completion of the required core.

- II. Courses for Thesis Option (30 credit hours)
 - A. Required Core 24 credits
 COM 501 Theoretical Perspectives (3)
 COM 502 Communication Research Methods (3)
 COM 600 Communication Studies Thesis (6)
 12 credits selected from departmental offerings
 - B. Applied Courses 6 credits
 These courses are to be selected from other departments or
 from communication studies courses.
- III. Comprehensive Examinations
 After the completion of all course work, nonthesis and thesis students will take a comprehensive written examination. Nonthesis students also will take an oral examination, while thesis students will defend their theses orally.

COURSE DESCRIPTIONS COMMUNICATION STUDIES

Symbol: COM

- Theoretical Perspectives on Human Communication (3) A comprehensive examination of major theoretical perspectives on human communication ranging from classical to contemporary.

 502 Communication Research Methods (3) An examination of the major issues pertaining to inquiry in human communication, including the nature of inquiry; qualitative and quantitative methodological approaches to communication research; moral and ethical standards for human research; the role of the researcher; and comparisons of academic research with research in marketing, public relations, and broadcasting. Students will be required to design and execute a research project.
- 503 Communication and Persuasive Influence (3) An analysis of major conceptual approaches to persuasion and their implications for understanding influence contexts and designing pragmatic strategies.
- 504 The Symbol Systems of Communication (3) Students will explore the verbal and nonverbal components of message creation in communication using primary theories to analyze language variables in different settings.

- 505 Concepts and Criticism of Public Influence (3) The criticism and history of influence will be explored to focus on examples of persuasion through public discourse.
- 506 Communication in Small Groups (3) An examination of traditional and contemporary research which pertains to various dimensions of small group communication including, but not limited to, the following topics: structure, size, tasks, goals, roles, systems, and leadership.
- 507 Issues in Mass Communication (3) An overview of the mass communication systems, including an analysis of the elements and processes of these media, their functions, and the major issues attending their use in our culture.
- 508 Special Topic Seminar (3) An intensive examination of a selected area within communication study. Topics will vary and will be announced in advance of each semester.
- 509 Communication and Conflict Resolution (3) Using both theoretical and activity-centered learning, the student will explore the options available to resolve conflict through communication.
- 515 Language, Thought, and Behavior (also LIN 515) (3) Introduction to the relativistic language concepts of Korzybski and his followers. The course focuses on what language does to people and the subsequent effects on communication.

- 517 Producing the Television Program (Non-dramatic) (3) Basic concepts of television planning and production for the nondramatic format. The student uses the tools of television. (Lecture and laboratory)
- 518 Television Program Directing (Dramatic) (3) Continuation and development of skills and knowledge in the use of television equipment; application of the arts of the theatre and film. (Lecture and laboratory) PREREQ: COM 517.
- 550 Listening: Verbal and Nonverbal Perceptions (3) A survey of research in listening behavior and related nonverbal variables. Identification of important characteristics of effective listeners. Application to communication activities in the classroom.
- 598 Graduate Internship in Communication Studies (3-6) Supervised professional training in approved communication placements. PRE-REQ: Approval of department chairperson.
- 599 Directed Graduate Studies (3) Research projects, reports, readings in speech communication. PREREQ: Approval of department chairperson.
- 600 Communication Studies Thesis (3-6) Original research, supervised through topic selection, investigation, and oral defense.

Communicative Disorders

Speech and Hearing Clinic 201 Carter Drive West Chester University West Chester, PA 19383 610-436-3401

Dr. Stigora, Chairperson and Coordinator of Graduate Studies

PROFESSOR

Michael S. Weiss, Ph.D., Purdue University

ASSOCIATE PROFESSORS

Mareile Koenig, Ph.D., University of Illinois Susan Maxwell, M.A., Ohio University Joseph A. Stigora, Ph.D., Bowling Green University Cleavonne S. Stratton, Ph.D., Ohio State University

ASSISTANT PROFESSOR

Elena F. Stuart, M.S., Purdue University

Program of Study

The department offers the Master of Arts degree in communicative disorders. The student may choose a thesis or nonthesis program. Both programs are designed to strengthen the knowledge and skill of the practicing speech clinician, to provide the foundation for further graduate study, and to afford an opportunity to complete requirements toward professional certification by the American Speech-Language-Hearing Association. Attainment of the master's degree does not necessarily guarantee recommendation for certification.

MASTER OF ARTS IN COMMUNICATIVE DISORDERS (39 semester hours)

Admission Requirements

In addition to meeting the general requirements for admission to a degree program at West Chester, applicants must:

- 1. Present an undergraduate background of at least 30 semester hours in the following areas of study: psychology, human development, linguistics, statistics, speech and language development, phonetics, speech disorders, language disorders, hearing disorders, basic speech and hearing science, and clinical experience.
- 2. Present undergraduate transcripts showing at least a 3.0 grade point average (GPA) in the last 60 hours of study.
- Demonstrate a reasonable degree of speech and language proficiency which may be measured by a written essay and a personal interview.
- 4. Submit Miller Analogies Test scores for purposes of evaluation and guidance.
- 5. Submit a log of undergraduate clinical practicum, when available.
- 6. Submit three letters of recommendation.
- 7. Submit a 250-word essay describing future goals and aspirations.

Admission to Degree Candidacy

- 1. The applicant may apply for degree candidacy after having completed SPP 501, 502, and 508. Application must be made before the student has completed 15 semester hours of graduate work required for the degree.
- 2. During the precandidacy period, the applicant must maintain an overall GPA of 3.0.
- 3. The applicant must have demonstrated satisfactory performance in clinical practicum at West Chester University.

Degree Requirements

1. The candidate must meet the general University requirements for

- the master's degree, including completion of all required courses, with an overall GPA of 3.0.
- 2. The nonthesis candidate must perform satisfactorily on a comprehensive written and oral examination, which may not be taken before the student's final semester of course work. Those who fail the examination may repeat it once. The interval between the two examinations may not exceed one year.
- The thesis candidate does not take the comprehensive examination but is required to participate in an oral defense and provide documentation that she/he has taken the ASHA certification examination.
- 4. The candidate must satisfactorily complete SPP 501, 502, 508, 523, 524, 526, 535, 536, three semester hours of graduate clinical practicum, plus 12 additional semester hours, chosen under advisement, which must include a graduate course in audiology and a graduate course in organic disorders.
- The student must be in continuous enrollment. Exceptions may be granted by submitting a written request to the graduate coordinator.
- 6. The M.A. requires the completion of 350 hours of clinical practicum, with a minimum of 250 hours required at the graduate level. These hours of clinical experience must be obtained in three distinctly different clinical settings. In order to earn the required practicum hours, most students will need to register for several semesters of clinical practicum; however, no more than three semester hours of graduate clinical practicum may be counted toward the 39 semester hours required for the degree.

Certification Programs

Candidates for the Master of Arts in communicative disorders may be recommended for the Certificate of Clinical Competence in Speech Language Pathology issued by the American Speech-Language-Hearing Association. They also may be recommended for the Pennsylvania Instructional 1 Certificate upon satisfactory completion of additional, required course work and clinical practicum.

COURSE DESCRIPTIONS COMMUNICATIVE DISORDERS Symbol: SPP

501 Foundations of Research in Speech Pathology (3) Introduction to the scientific process and to the interpretation and application of research in the speech sciences. A research project outline required.

502 Experimental Phonetics (3) Study of acoustic and physiological mechanisms underlying speech production and perception. Current theoretical models are reviewed and analytical instrumentation demonstrated. Students are provided with laboratory experiences to complement lecture materials.

508 Neurology of the Speech and Hearing Mechanism (3) This course provides the student with information concerning the neuroanatomical and neurophysiological mechanisms underlying the speech and hearing process.

523 Voice Disorders (3) Examination of classification, etiology, diagnosis, and therapy for functional, organic, and psychological voice disorders

524 Fluency Disorders (3) Consideration of the nature, causes, diagnosis, and treatment of stuttering and related disorders of speech flow. Critical review of pertinent research.

526 Articulation Disorders (3) Theoretical considerations, research findings, and clinical practices concerning disordered speech sound production.

535 Language Disorders of Children (3) Linguistic and neurological aspects of behavior relative to disorders of language in children. Review of etiology, assessment, and treatment. 536 Aphasia (3) Study of the behaviors associated with language disorders in adults. Emphasis on etiologies, symptoms, assessment, and rehabilitative procedures.

543 Therapy for the Hearing Impaired (3) Evaluative and therapeutic materials and methods applicable to the improvement of communication in hard-of-hearing individuals. PREREQ: SPP 546 or equivalent.

546 Aural Rehabilitation (3) Medical, prosthetic, and educational approaches to aural rehabilitation for children and adults.

547 Audiometry (3) Lecture/laboratory course in the measurement of hearing.

550 Advanced Diagnostic and Therapeutic Methods in Speech Pathology (3) Current and advanced evaluative methods and materials applicable to the diagnosis and remediation of communication disorders.

♦ 551 Graduate Clinical Practicum (3) Supervised practice in the Speech and Hearing Clinic. Designed to increase diagnostic and therapeutic skills with children and adults who have communication problems.

♦ 552 Affiliation Practicum (3, 6, 9) Supervised practice in an affiliated clinic or school. Designed to increase diagnostic and therapeutic skills with children and adults who have communication disorders. PREREQ: SPP 551 and permission of the department.

560 Seminar in Speech Pathology (3) Selected theoretical and clinical areas of speech pathology and related disciplines. Topics vary each semester

according to research developments and student needs.

561 Seminar in Audiology (3) Selected areas in audiology and related disciplines. Topics vary each semester according to developments in research and student needs.

562 Research Seminar (3) Development of an individual research project of the student's choice. Research design, methodology, and data analysis will be emphasized. PREREQ: SPP 501. A course in statistics is recommended.

569 Clinical Instrumentation (3) Evaluation, selection, use, and maintenance of electronic aids for the speech and hearing clinician. Demonstration of equipment for diagnosis, therapy, and classroom use. Students will have ample opportunity to work with tape recorders, auditory trainers, and special calibration techniques.

570 School Language, Speech and Hearing Programs (3) Orientation to and observation of the organization, administration, and operation of school speech-language and hearing programs (preschool through grade 12).

573 Administration and Supervision of Speech and Hearing Programs (3) Nature and scope of supervisory positions in speech and hearing programs. Emphasis on administrative problems.

580 Orofacial Anomalies (3) Comprehensive consideration of the nature, causes, diagnosis, and treatment of communication disorders associated with orofacial anomalies, particularly cleft hp and cleft palate.

♦ This course may be taken again for credit.

589 Neuromuscular Disorders (3) Nature, causes, diagnosis, and treatment of communication disorders associated with neuromuscular dysfunction, with particular attention to the cerebral palsies.

590 Independent Study (1-3) Individualized research projects, reports, and/or readings in speech pathology or audiology under faculty supervision. PREREQ: Approval of department chairperson.

Workshop in Communicative Disorders (3)

Thesis (1-6)

Computer Science

13-15 University Avenue West Chester University West Chester, PA 19383 610-436-2440

For general information and a listing of faculty, see Mathematics and Computer Science.

Programs of Study

The department offers a Certificate Program for students whose undergraduate degree is not in computer science, and a Master of Science degree for students who possesss an undergraduate degree in computer science or a closely related discipline. Students who complete the certificate program will be awarded a certificate in computer science.

MASTER OF SCIENCE IN COMPUTER SCIENCE

The purpose of this program is to provide its graduates with the intellectual and practical tools that they will need either to pursue careers as professional computer scientists in industry or to pursue a doctorate degree in computer science at a doctoral-granting institution. The curriculum is designed with three goals in mind:

- 1. A solid foundation in the fundamental principles of computer science (the core).
- 2. Exposure to a variety of subject areas (the 500-level electives).
- 3. Exposure to research topics of current interest and to provide in-depth knowledge of several areas (the 600-level courses).

The computing platform is mainly UNIX-based workstations, and the programming paradigm is mainly object oriented.

Admission Requirements

Applicants for the Master of Science program in computer science must satisfy the general graduate admission requirements of the University. Further, applicants should possess an undergraduate degree in computer science or an equivalent degree. An applicant who does not have an undergraduate degree in computer science or the equivalent may, however, apply for admission into the certificate program, which is an 18-credit program designed to give students a broad knowledge of standard topics in computer science. See "Certificate Program" below.

Applicants also must have submitted by the Educational Testing Service (ETS) their verbal, quantitative, and qualitative Graduate Record Examination results (GREs). These tests may be taken no more than five years prior to the date of application to the program. A TOEFL score of 550 is required for non-native speakers only. Three letters of recommendation also are required of all applicants.

Degree Requirements

A student must take a total of 33 credits from the following courses (subject to the stipulations listed below):

All four core courses (12 credits)

CSC 520 Foundations of Computer Science (3 credits)

CSC 530 Data Structures (3 credits)

CSC 540 Programming Languages (3 credits)

At least four 500-level electives (at least 12 credits)

CSC 525 Operating Systems (3 credits)

CSC 535 Networks and Data Communications (3 credits)

CSC 545 Database System Concepts (3 credits)

CSC 555 Software Engineering (3 credits) CSC 565 Compiler Design (3 credits)

CSC 560 Analysis of Algorithms (3 credits)

CSC 570 Computer Architecture (3 credits)

CSC 573 Graphics and User Interfaces (3 credits)

CSC 575 Artificial Intelligence (3 credits)

CSC 581 Topics in Computer Science (3 credits)

At least two 600-level courses (at least 6 credits) CSC 600 Advanced Seminar (3 credits)

(See stipulation #3 below.)

CSC 610 Thesis I (3 credits)

CSC 620 Thesis II (3 credits)

Stipulations:

- 1. A student must complete the four core courses within the first six courses taken.
- 2. All core courses must be completed before a student can take a 600-level course.
- 3. The Advanced Seminar course offers a variety of advanced topics in computer science. Different topics will be listed as different sections of this course. A student must take at least one section and not more than two of these.
- 4. A student who elects to do a master's thesis must take CSC 610 Thesis I and CSC 620 Thesis II.

Thesis Options

Thesis 1 (CSC 610)

The student may work in one of three directions for this course:

- 1. Master's Thesis Preparation: After consulting with a faculty adviser, the student will conduct a comprehensive literature search in a research area, write a detailed report on the current state of the art in that area, and develop a thesis proposal.
- 2. Individual Project: The student will work on a substantial programming project throughout the semester. The student will be expected to do sufficient background research and then design, as needed, all the data structures, flow of control, and so forth, required for implementation.
- 3. Team Project: The student will be involved in an ambitious software development project with at least one other student under the guidance of the adviser. This course emphasizes the development of those capabilities that are considered especially important in the practical world of computing, such as written and oral communications skills and the ability to work as part of a team.

Thesis II (CSC 620)

The student is to carry out the research proposal developed in Thesis I. At the completion of the project, the student must submit a bound manuscript which meets the approval of the graduate committee.

CERTIFICATE PROGRAM

This program is designed for students whose undergraduate degree is not in computer science. The certificate program in computer science has two fundamental purposes:

- 1. To serve as a "bridge" between an undergraduate degree in some field other than the discipline of computing and the regular master's degree program in computer science.
- 2. To allow those who wish to study computing at the graduate level, without pursuing a master's degree, to do so.

The program consists of six 3-credit courses offered over two semesters. These graduate-level courses are specifically designed to give students broad knowledge of those topics in computer science which would be known by a college graduate in the field. Students who complete the prerequisite program with a 3.0 GPA or better will receive a certificate in computer science. They also will be entitled to enter the computer science master's degree program.

Admission Requirements

The applicant is expected to have a bachelor's degree from an accredited institution, four semesters of mathematics (Calculus I, II, and two other courses at this level or above), and the GRE aptitude

tests. Non-native speakers are expected to have a TOEFL score of 550. Three letters of recommendation are required of all applicants.

Curriculum

Fall Semester:

Computer Programming I (CSC 512) Computer Organization (CSC 514) Discrete Mathematics (MAT 281)

Spring Semester:

Computer Programming II (CSC 513) Introduction to Data Structures and Algorithms (CSC 516) Programming Paradigms (CSC 517)

COURSE DESCRIPTIONS CERTIFICATE PROGRAM IN COMPUTER SCIENCE Symbol: CSC

These courses may not be used for credit in the master's degree program.

CSC 512 Computer Programming I (3) The principles of algorithmic problem solving is introduced using the C++ language. This course teaches programming techniques which involve elementary data and control structures.

CSC 513 Computer Programming II (3) This course further develops the topics started in Computer Programming I with a strong emphasis on software issues and object-oriented program design. PREREQ: CSC 512.

CSC 514 Computer Organization (3) This course introduces students to the basics of computer hardware design, including digital logic and hardware components. Assembly-level programming is taught as a tool for understanding how it is used by compilers of high-level languages.

CSC 516 Introduction to Data Structures and Algorithms (3) This course introduces the definitions, implementations, and applications of the most basic data structures used in computer science. The concept of abstract data type is introduced and reinforced by the object concept of C++. PREREQ: CSC 512.

CSC 517 Programming Paradigms (3) This course is designed to develop students' understanding of the nature of programming languages and to enhance their programming skills. The approach is more formal than in a beginning course and emphasizes both the general features of languages and sound problem-solving methods. PREREQ: CSC 512.

MASTER'S PROGRAM IN COMPUTER SCIENCE Symbol: CSC

CSC 520 Foundations of Computer Science (3) This course offers an advanced treatment of

many of the theoretical areas underlying other computer science subjects.

CSC 525 Operating Systems (3) This course covers the basic features of operating systems. Examples will be drawn from UNIX and other operating systems. This course includes an intensive study of the UNIX operating system by way of the UNIX kernel commands and utilities. CSC 530 Data Structures (3) This course builds on rudimentary understanding of linked structures and develops complex data structures such as trees, hash tables, graphs, etc. It also introduces the basics of asymptotic analysis of running time and space in order to provide the justification for various data structures.

CSC 535 Networks and Data Communications (3) This course provides in-depth studies of various aspects of modern telecommunication systems such as network design, network implementation, serial port communications, and user interfaces.

CSC 540 Programming Languages (3) This course introduces the theoretical and practical foundations of programming languages from the point of view of design and implementation. CSC 545 Database System Concepts (3) This course emphasizes recent technological advances in database management systems. The course centers around data models and languages for those data models. Special attention is paid to relational and object-oriented data models and systems which implement these. PREREQ: CSC 520. CSC 555 Software Engineering (3) This course emphasizes important topics in software engineering from an object-oriented point of view (as opposed to the older functional, or structural analysis approach).

CSC 560 Analysis of Algorithms (3) This course introduces the methods to analyze the efficiency of computer algorithms in terms of their use of both space and time. Algorithmic design techniques, such as divide and conquer, greedy methods, and dynamic programming are illustrated throughout the course. The theory of NP-completeness and tractibility is introduced. PREREQ: CSC 520.

CSC 565 Compiler Design (3) An in-depth study of the principles and design aspects of programming language translation. Students will design and implement a compiler using standard UNIX-based compiler tools for a small but representative language. PREREQ: CSC 520.

CSC 570 Computer Architecture (3) This course will study the methodology for design of components and interfaces in a uniprocessor computer. Various architectures/machine languages are compared, and one is studied in depth. CSC 573 Graphics and User Interfaces (3) This course covers the basic aspects of generating and transforming computer graphical images.

CSC 575 Artificial Intelligence (3) Artificial Intelligence (AI) aims to reproduce or simulate the intelligent capacities of human beings such as forming plans of action and conversing in English. This course will combine theoretical, practical, and programming aspects of AI. Common Lisp will be used for programming projects. PREREQ: CSC 520.

PREREQ: Linear algebra background.

CSC 581 Topics in Computer Science (3) This course will allow instructors to teach a 500-level (not research-oriented) course in a computer science topic not specified in the current course list. Different topics will be taught as different sections of this course. PREREQ: To be determined by topic.

CSC 600 Advanced Seminar (3) This is a research-oriented course which will involve an investigation into an advanced and specialized topic determined according to faculty and student interest. PREREQ: Completion of 18 graduate credits including the core courses.

CSC 610 Thesis 1 (3) The student may work in one of three directions: thesis, individual project, or team project. (See "Thesis Options" above.) PREREQ: The agreement of the faculty member to act as an adviser.

CSC 620 Thesis II (3) A continuation of Thesis I. (See "Thesis Options" above.) PREREQ: The permission of the thesis adviser, and approval of the thesis proposal by the Computer Science Graduate Committee.

Counselor, Secondary, and Professional Education

207 Recitation Hall West Chester University West Chester, PA 19383 610-436-2958

Dr. Kahn, Chairperson

Dr. Hynes, Assistant Chairperson

Dr. Gadaleto and Dr. Socoski, Coordinators of Graduate Studies

PROFESSORS

Angelo F. Gadaleto, Ph.D., University of Virginia Charles W. Good, Ed.D., Temple University Yi-Ming Hsu, Ed.D., University of Georgia Wallace J. Kahn, Ph.D., University of Maryland Shirley A. Walters, Ed.D., Temple University

ASSOCIATE PROFESSORS

Deborah S. Brown, Ph.D., University of Delaware John Holingjak, Jr., M.Ed., Temple University John L. Hynes, State University of New York at Albany Carol M. Napierkowski, Ph.D., University of Connecticut Richard D. Parsons, Ph.D., Temple University Jay Silverman, Ph.D., New York University

ASSISTANT PROFESSORS

David L. Bolton, Ph.D., Florida State University Kimberlee S. Brown, University of Pennsylvania

Cynthia Haggard, Ed.D., Indiana University Stephanie L. Hinson, Ed.D., University of Virginia Robert S. Kurzinsky, Ed.D., Nova University Patrick M. Socoski, Ph.D., University of Pittsburgh Lesley A. Welsh, Ph.D., University of Connecticut

Programs of Study

The Department of Counselor, Secondary, and Professional Education offers a variety of graduate programs leading to professional certification, as well as the Master of Education and Master of Science degrees.

Counselor Education

Counselor education offers two degree programs. The first is a degree-certification program that leads to the Master of Education and the Educational Specialist I Certificate for elementary school counselors or secondary school counselors.

The second leads to the Master of Science degree for persons interested in counseling in community agency and higher education settings. Master of Science candidates have the option of taking additional course work which will qualify them for certification as elementary school counselors or secondary school counselors.

A handbook describing both programs in detail is available from the department's graduate office.

Admission Requirements

An applicant is expected to have an undergraduate degree from an accredited college or university. In addition, he or she must meet an undergraduate grade point average (GPA) entry requirement of 2.8 on a scale of 4.0.

Applicants who do not have the required undergraduate GPA of 2.8 may receive provisional status and permission to take the courses required to complete Competency Area I, where they can demonstrate academic ability by maintaining a GPA of 3.0 or better.

Degree Requirements

Upon meeting admission criteria, students are accepted for Competency Area I. During this phase, they are evaluated for academic achievement (must maintain a minimum GPA of 3.0 in all graduate course work) and interpersonal relationship skills. Upon successful completion of Competency Area I and departmental recommendations (i.e., formal approval for degree candidacy), students become degree candidates for the remainder of the program, which encompasses advanced work and field experiences. Upon completion of the prescribed work and the adviser's recommendation, candidates must take a comprehensive examination. The degree being pursued will be granted only when the student has met the standards of the Department of Counselor, Secondary, and Professional Education. Students desiring the degree without certification may take six credits of electives under advisement in lieu of the practicum requirements.

Certification

In order to obtain the Educational Specialist I Certificate, the student must successfully complete the required practicum in an approved secondary or elementary school. This course provides an opportunity for the student, under West Chester University faculty supervision, to work closely with a professional counselor in a public school. The certificate is issued on the basis of the program approval status of the counselor education program at the University as granted by the Pennsylvania Department of Education.

MASTER OF EDUCATION: ELEMENTARY SCHOOL COUNSELING OPTION (42 semester hours)

Dr. Kahn, Program Coordinator

Competency Area 1: EDC 503, 567, 571,

EDF 502

Competency Area II: EDC 520, 540, 556,

572, 574, 576, 585, EDF 589 24 semester hours

6 semester hours Competency Area III: EDC 590, 593

Complementary course work may be required by adviser

MASTER OF EDUCATION: SECONDARY SCHOOL COUNSELING OPTION (42 semester hours)

Dr. Parsons, Program Coordinator

Competency Area I: EDC 503, 567, 571, **EDF 502**

Competency Area II: EDC 520, 540, 556,

24 semester hours 573, 575, 576, 585, EDF 589 Competency Area III: EDC 591, 593 6 semester hours

Complementary course work may be required by adviser

MASTER OF SCIENCE: HIGHER EDUCATION/POST SECONDARY COUNSELING OPTION (39 semester hours)

Dr. Gadaleto, Program Coordinator

Competency Area 1: EDC 531, 567, 571,

EDF 502

Competency Area II. EDC 530, 540, 556,

578, 579

Competency Area III: EDC 592, 593

Complementary course work approved by adviser

12 semester hours

12 semester hours

12 semester hours

15 semester hours

6 semester hours

6 semester hours

COURSE DESCRIPTIONS COUNSELOR EDUCATION

Symbol: EDC

503 Introduction to Guidance Services (3) Historical development, philosophical foundations, and determinants of guidance services in contemporary elementary and secondary education. Special services, testing, group and individual counseling, and other elements. Guidance as a profession, ethics, current developments, and trends.

- 520 Counseling for Human Differences (3) Examination of differences manifested by individuals. The purpose of the examination is to prepare counselors for designing counseling strategies appropriate to the uniqueness of the
- 530 The College Student The course will include an overview of the student services profession. Theories of student development and their application to student services will be examined.

Issues of contemporary students will be explored.

531 Introduction to Counseling in Higher Education (3) Introduction to the type of counseling services that are provided in higher education and to the settings in which these take place.

540 Assessment Methods in Guidance (3) Emphasis is on the test and nontest assessment of intelligence, achievement, special abilities, and aptitudes, including concepts such as reliability, validity, and standardization.

545 Psychometric Interpretation (3) A survey course involving the use of psychometrics as the vehicle for the diagnosis of learning problems. Test interpretation and reporting are emphasized. 556 Career Development Theories and Practices (3) Theories and techniques relating to career development in children, adolescents, and adults. Career development programming within the context of a systems approach is stressed. 567 Group Dynamics (3) This course in group processes focuses on the identification of the implicit and explicit role functions of the group member and the group leader. The recognition and awareness of one's behavior with multiple feedback sources is of primary concern. The major objective of this course is to initiate, develop, and master relationships in a group setting. 568 The Professional Counselor in the Elemen-

tary School (3) Role, responsibilities, and practices of the contemporary elementary school counselor. Development of the guidance program; relationship to curricula; position of the counselor with respect to administration, parents, children, and teachers. 569 The Professional Counselor in the Secondary School (2) Role, responsibilities, and practice of the contemporary secondary school counselor. Referral resources, parental conference techniques, relationship with administration and staff, curricula, and administrative aspects of the guidance program. 571 Theories of Counseling (3) The basic theories of counseling, with emphasis on historical and philosophical origins. Historical antecedents of each

ry as a viable approach for counselors.
572 Counseling Techniques in Elementary School
(3) Practical application of basic theories and techniques of individual counseling with children in elementary school settings. The pre-practicum course includes actual counseling experience with children.

theory, and evaluation of the potential of each theo-

573 Counseling Techniques in Secondary School (3) Practical application of the basic theories and techniques of individual counseling with adolescents in secondary school settings. This prepracticum course includes actual counseling experience with adolescents.

574 Group Procedures in the Elementary School (3) Emphasis is on mastering the basic theories and techniques appropriate to group procedures in the elementary school. Exposure to planning, implementing, and evaluating group activities.

575 Group Procedures in the Secondary School (3) Mastery of theories and techniques basic to planning and implementing group activities in the secondary school. Evaluation of group activities also is stressed.

576 Consultation and Coordination in Guidance and Counseling (3) This prepracticum course focuses on models, mechanisms, and strategies of employing consultation and coordination in remedial and preventive interventions in educational settings. Systems analysis and program development and evaluation will be addressed relative to consultation and coordination. 578 Counseling Techniques with Adults (3) Practical application of basic theories and techniques of individual counseling with adults. The prepracticum course includes actual counseling with adults

579 Group Procedures with Adults (3) Techniques for planning and implementing group procedures applicable to adults. Topics include group counseling, group guidance, multiple connseling, problem solving and decision making, task group facilitation, conflict mediation, group process and outcome evaluation, and the legal/ethical implications of group work. Each student is required to conduct a group counseling experience.
585 Contemporary Issues and Trends in

Guidance (3) Contemporary issues and current

trends in school guidance. The student evaluates basic positions and integrates them into the prospective role of a school counselor.

590 Practicum in Elementary Guidance (3) Supervised practice in an approved elementary school. In addition to work under the direction of a professional counselor in the school setting, the student meets on campus with the practicum supervisor for intensive seminar activities. PREREQ: EDC 572, 574, 576. EDC 540 and EDC 556 must be taken before or concurrently. Permission of adviser.

591 Practicum in Secondary Guidance (3) Supervised practice in an approved secondary school. The student works under the direction of a professional counselor in the school setting and meets on campus with the practicum supervisor for intensive seminar activities. PREREQ: EDC 573, EDC 575, and EDC 576. EDC 540 and EDC 556 must be taken before or concurrently. Permission of adviser.

592 Practicum in Higher Education Guidance (3) Supervised counseling experiences within the higher education system or another approved setting. A related on-campus seminar is included. PREREQ: EDC 578, EDC 579. EDC 540 and EDC 556 must be taken before or concurrently. Permission of adviser.

593 Advanced Practicum (3) Intensive supervised counseling experience in an approved setting. The practicum consists of on- and off-campus experiences. PREREQ: EDC 590 or 591 or 592.

598 Workshop in Counselor Education (3) 599 Independent Study (1-3) Independent research and study under the direction of a faculty member. PREREQ: Permission of department chairperson and instructor.

Secondary Education and Professional Studies

The Secondary Education and Professional Studies program is responsible for the professional courses offered for certification on the secondary level and in the Master of Education degree programs having academic concentrations. The department also offers other professional course work required in all M.Ed. programs, and some courses designed for educators and others who wish to develop new insights and to strengthen professional skills.

In addition, the department offers a Master of Education in secondary education.

MASTER OF EDUCATION

The Master of Education program has concentrations in chemistry, French, German, history, Latin, and Spanish, offered cooperatively by the School of Education and the College of Arts and Sciences. The academic requirements for each concentration are found under the respective department.

With this degree, students can strengthen their knowledge in the major subject area, as well as their professional knowledge and competence.

Students earning degrees in this program must be advised both by the department of the subject field and by the Department of Counselor, Secondary, and Professional Education. Students are responsible for arranging conferences with both departments to plan their programs.

Degree Requirements (36 semester hours)

I. Professional Education Requirements*
A. EDF 510 Educational Foundations (3)

12 semester hours

B. A minimum of one course from each of the following groups:

Group 1

EDF 516 Resource Allocation in the Schools (3)

EDF 520 Comparative Education (3)

EDF 580 History of American Education (3)

EDF 581 Philosophy of Education (3)

EDF 589 Sociological Foundations of Education (3)

Group 2

EDF 503 The Emerging Curriculum (3)

EDF 507 Values Clarification in Human Relations (3)

EDF 509 Contemporary Teaching Trends (3)

EDP 531 Principles of Educational Testing (3)

EDP 550 Advanced Educational Psychology (3)

EDP 557 Essentials of Learning (3)

EDP 560 Behavior Modification (3)

EDP 569 Adolescent Development and Learning (3)

EDS 524 Supervision of Student Teaching (3)

EDU 502 Human Relations in the School and Community (3)

Group 3

EDC 567 Group Dynamics (3)

EDF 504 Middle School Workshop (3)

EDF 505 Individually Prescribed Instruction (3)

EDF 506 Design and Use of Individualized Learning Packages (3)

EDF 570 The Community/Junior College (3)

EDF 590 School Law (3)

EDS 502 Secondary School Curriculum (3)

EDU 501 Curricular Adaptations for the Disadvantaged (3)

^{*}Chosen in conference with the secondary education and academic advisers according to the students' needs.

11. Concentration Requirements

21-23 semester hours

- A. Methods and Materials of Research (1-3)
- B. Academic Subject (18-20)

(See respective academic department for details)

III. Electives (Professional or Academic)*

1-3 semester hours

Comprehensive Examinations

The student must perform satisfactorily on the final comprehensive examination covering the subject matter concentration and the professional education requirements.

MASTER OF EDUCATION IN SECONDARY EDUCATION

Dr. Patrick M. Socoski, Program Coordinator

This program, another option within the Master of Education shown immediately above, is designed primarily to strengthen the professional knowledge, skills, and understanding of the graduate student and of teachers in service, and to make their preparation more relevant to a variety of educational situations. It also provides the professional background for dealing effectively with problems encountered in secondary schools. Its 15 semester-hour elective area allows students to strengthen their knowledge in the subject.

Admission Requirements

In addition to meeting admission requirements of the University, the student must:

- 1. Be approved by the Department of Counselor, Secondary, and Professional Education for graduate work.
- 2. Attain an acceptable score on the Graduate Record Examination or the Miller Analogies Test. It is strongly recommended that the applicant have a valid teaching certificate. Applicants whose certification is not in secondary education may, at the department chairperson's discretion, be required to take course work beyond the minimum semester-hour requirements for the degree.

Upon admission, students will be assigned advisers who will help them to outline the appropriate program. All work for the program must be approved by the adviser and the departmental graduate

Requirements for Admission to Degree Candidacy

During the precandidacy period, the student must:

1. Attain full status, if admission status to the program was provisional.

- 2. Complete these required courses: EDF 500 and 510, and EDP 550.
- 3. Achieve a minimum overall grade point average (GPA) of 3.0 and a minimum GPA of 3.0 in the required courses in the area of con-
- 4. Show evidence of academic, personal, and professional qualities that satisfy the adviser and the departmental graduate committee.

Degree Requirements

(36 semester hours)

I. Required Courses EDF 500 and 510, EDP 550 9 semester hours

II. Area of Concentration Requirements 12 semester hours A minimum of 12 semester hours must be selected from the

EDF 503, 504, 505, 506, 507, 509, 515, 516, 520, 570, 580, 581, 589, 590; EDP 531, 557, 560, 569; EDS 502, 524, 599;

Electives

15 semester hours

The electives may be from courses listed above, or from courses in the student's teaching field. They also may be a combination of both.

Comprehensive Examination

Students must perform satisfactorily on a written comprehensive examination, which is given at least once in each semester and in the summer session.

To be eligible, students must have:

- 1. Taken the required courses: EDF 500 and 510, and EDP 550.
- 2. Completed 28 semester hours of work, including the nine semester hours of required courses and 12 semester hours from the area of concentration.
- 3. Attained a minimum overall average of 3.0 and a minimum average of 3.0 in the required courses and the courses in the area of
- 4. Received their advisers' recommendations and the approval of the departmental graduate committee.

Students who fail the comprehensive examination are allowed a second attempt. A second failure terminates candidacy.

*Chosen in conference with the secondary education and academic advisers according to the students' needs.

COURSE DESCRIPTIONS **FOUNDATIONS**

Symbol: EDF

500 Methods and Materials of Research in Education (3) Historical, descriptive, and experimental methods of research. Methods for locating, evaluating, interpreting, and reporting research data. Each student prepares a research prospectus

501 Methods and Materials of Research for Elementary Education (3) Historical, descriptive, and experimental methods of research. Methods for locating, evaluating, interpreting, and reporting research data. Introduction to graduate study for elementary majors.

502 Methods and Materials of Research for Counselor Education (3) Designed to enable the counselor to read experimental, quasi-experimental, descriptive, and correlational research reported in the professional journals. Both univariate and multivariate designs are emphasized.

503 The Emerging Curriculum (3) Curriculum trends in the 1980s and 1990s, focusing on various reform efforts and including issues of race, gender, class, and ethnicity.

504 Middle School Workshop (3) Philosophy,

administration, curriculum, staff, and facilities necessary for the most efficient educational experience in the intermediate levels of school.

505 Individually Prescribed Instruction (3) Individually prescribed instructional techniques as applied in the classroom and intensive learning centers. Techniques of academic diagnosis, prescription production, and electronic learning. Students will have an opportunity to work directly with hardware and software components of an intensive learning center. (May be arranged as a workshop.)

506 Design and Use of Individualized Learning Packages (3) A review of commercially available individualized learning activity packages that permit students to progress through a learning continuum at their own pace. Students will be required to design and construct individualized learning packages in their teaching areas.

Values Clarification in Human Relations (3) Knowledge of the theories of the values clarification processes as defined by Simon and others. Skills in application of the values clarification processes in personal decisions, in the classroom, and in society. (May be arranged as a workshop or as modularized independent study.)

509 Contemporary Teaching Trends (3) Team teaching, programmed instruction, and various media of communication in the elementary and secondary schools are evaluated. Effective adaptation to newer practices is emphasized.

510 Educational Foundations (3) History of education, integrated with educational philosophy and thought; the long evolution of education

theory and issues.

515 Federal and State Role in Education (3) The past, current, and future role of the federal and state governments in education in the United States. Emphasis on applications to the Commonwealth of Pennsylvania. Impact of federal legislation since 1958.

516 Resource Allocation in the Schools (3) The relationship between the American economy and the efficient allocation of resources within school systems will be examined. Designed for teachers, administrators, school board members, and parents.

520 Comparative Education (3) Major problems of education in a number of other countries are related to similar problems in the United States. Contrasting purposes and philosophies, and differences in organization and administration are analyzed.

570 The Community/Junior College (3) An analysis of the programs, problems, and students of a two-year college. Emphasis on the development, special philosophies, and current issues relating to the community or junior college. Designed for students preparing to be teachers and/or administrators in these colleges.

580 History of American Education (3) Nature and direction of American education, studied through individual and group research.

581 Philosophy of Education (3) Selected philosophies and their influence on educational principles and practices in a democratic social order.

589 Sociological Foundations of Education (3) Study of the socio-cultural influences on the structure of American educational institutions.

590 School Law (3) Legal structure for educational organization on state, intermediate, and local levels. Legal status of the board of education; legal responsibilities of the teacher; legal responsibilities of the board of education to the student.

Workshop in Secondary Education (3)Workshop in Professional Education (3)

EDUCATIONAL PSYCHOLOGY Symbol: EDP

531 Principles of Educational Testing (3) Designed to develop in teachers the skills important in the three areas of educational testing: teacher-made tests (objective and essay); computerized programs for grading and reporting results, and for improving the test quality through itemanalysis procedure; and the evaluation of the psychometric characteristics of standardized tests 550 Advanced Educational Psychology (3) Processes by which skills, understanding, concepts, and ideals are acquired; teaching practices in relation to basic research concerning learning; similarities and differences in theories of learning. 557 Essentials of Learning (3) Study of the applications of learning theory to classroom teaching, with emphasis on those principles derived from classical and operant conditioning. Retention and transfer of learning also considered. 560 Behavior Modification (3) Study of principles of classical and operant conditioning as they relate to the modification of student behavior in residential and educational settings. Emphasis on

such areas as classroom discipline, student

values, and student study habits.

569 Adolescent Development and Learning (3) Mental, physical, emotional, and social development and behavior of the adolescent with emphasis on various types of learning. Case studies are used.

598 Workshop in Educational Psychology (3) SECONDARY EDUCATION

Symbol: EDS

502 Secondary School Curriculum (3) Current practices and trends in reorganizing the secondary school curriculum in the major academic areas. The various integrating techniques. Curriculum development.

524 Supervision of Student Teaching (3) Designed for teachers who cooperate, or expect to cooperate, in West Chester University's student teaching program. Basic principles, practices, materials, and resources for an effective student teaching program. PREREQ: Certification for teaching.

590 Independent Study (1-3) Enrollment by permission only; number of credits determined by department.

599 Workshop in Secondary Education (3)

Educational Research

Dr. Hsu, Program Coordinator

The School of Education offers a degree program leading to the Master of Science in educational research. The degree is designed primarily for those desiring research positions in local school districts, but it is also appropriate for research positions in colleges and universities, community colleges, governmental agencies, regional educational laboratories, and industry.

MASTER OF SCIENCE IN EDUCATIONAL RESEARCH

Admission Requirements

To be admitted to the program, the applicant must have:

- 1. A minimum overall GPA of 2.5 in undergraduate studies and 2.75 in the major field.
- 2. Satisfactory performance on the Graduate Record Examination Aptitude Test.
- 3. Personal interview with the coordinator of the program. Any candidate admitted to graduate study, but not to the degree

program in educational research, may take RES courses with the permission of the coordinator. There is no guarantee that courses taken by a nondegree student may later satisfy degree requirements for the M.S. in educational research.

Degree Requirements

- 1. Satisfactory completion of the curriculum outlined below.
- 2. An overall GPA of 3.0 in graduate courses taken in the degree program.
- 3. Satisfactory performance on the comprehensive examination.
- 4. Completion of a research report or master's thesis, approved by the coordinator.

Requirements for Admission to Degree Candidacy

Upon completion of 12 semester hours, which must include PSY 501 (Introductory Statistics for the Behavorial Sciences) and EDF 500 (Methods and Materials of Research in Education), candidates will be advanced to degree candidacy, provided they have maintained a minimum GPA of 3.0 and passed a qualifying examination.

The Internship

After mastery of the core courses (EDF 500, PSY 501 and 502, and RES 520), students will serve an internship with an outside agency, or

in the Office of Institutional Research conducting educational research. During this period, students will use the skills they have developed to design and conduct a research project under the joint supervision of University and/or host institutional personnel.

The Comprehensive Examination

To be eligible for the comprehensive examination, the candidate must:

- 1. Have completed at least 28 semester hours and all core courses prior to the semester in which the examination is taken.
- 2. Have maintained an overall GPA of at least 3.0.

 Candidates must indicate by letter their intention to take the examination. The coordinator should receive this letter within the first 10 days of the semester in which the candidate wants to take the examination.

Candidates who fail the comprehensive examination are permitted one re-examination after an interval of at least one semester but not more than two years.

Curriculum

(36-39 semester hours)

CSC 550 Computers in Education (3)

EDC 540 Assessment Methods in Guidance (3)

EDF 500 Methods and Materials of Educational Research (3)

EDF 510 Educational Foundations (3)

EDP 531 Principles of Educational Testing (3)

EDP 550 Advanced Educational Psychology (3)

PSY 501 Introductory Statistics for the Behavorial Sciences (3)

PSY 502 Advanced Statistics for the Behavorial Sciences (3)

RES 520 Research Design (3)

RES 590 Independent Study in Educational Research (1-3)

RES 592 Internship Program in Educational Research (3) Optional:

RES 610 Thesis (3) or

RES 650 Research Report (3) plus three-credit elective

Elective courses:

CSC 515 Introduction to Computer Programming (3)

PSY 526 Program Evaluation (3)

Others to be determined by program coordinator.

COURSE DESCRIPTIONS EDUCATIONAL RESEARCH

Symbol: RES

520 Research Design (3) Principles for efficient design of experiments and other types of observational programs. Sampling techniques, methods of analysis, threats to valid inference. PREREQ: PSY 501.

590 Independent Study in Educational Research (1-3) Research project, reports, readings in educational research. PREREQ: Coordinator's approval.

592 Internship Program in Educational Research (3) Opportunity for students to design, conduct, and analyze a study and to prepare a report of the research. The internship is served in

local educational agencies, county offices, federal project centers, the Pennsylvania Department of Education, or other research environments. The intern is supervised by both host and University personnel

610 Thesis (3)

650 Research Report (3)

Environmental Education

Mr. Holingjak, Coordinator

Graduate students interested in developing a concentration in the area of environmental education may elect from the following courses.

COURSE DESCRIPTIONS ENVIRONMENTAL EDUCATION Symbol: EDO

505 Conservation Education Curriculum (K-12) (3) Conservation education as it exists in the present school curriculum and ways to integrate conservation into elementary and secondary school disciplines. Characteristics, interrelationships, and uses of our natural resources; problems and policies of industrial management in conservation as they relate to the school curriculum.

510 Methods in Conservation Education (3) Basic concepts and practices of conservation and outdoor education and their role in the school program.

511 Environmental Education Workshop (3) A field-centered learning experience. Designed to integrate the wide range of backgrounds and interests among the participants. Based on West Chester campus and/or the campuses of other universities.

515 History of Conservation (3) Development of the conservation movement in the U.S. with

emphasis on the progressive adaptation of conservation to our changing social and economic order.

520 Organization and Administration of Outdoor Education (3) Basic concepts of outdoor education: the role of outdoor education in the school program; the initiation and administration of outdoor education.

525 Independent Studies in Environmental Education (3) Special research projects, reports, and readings in conservation and outdoor education. PREREQ: Permission of coordinator.
598 Workshop in Environmental Education (3)

Urban Education

Dr. Hynes, Coordinator

Graduate students interested in developing a concentration in the area of urban education may elect from the following courses.

COURSE DESCRIPTIONS URBAN EDUCATION Symbol: EDU

Symbol: EDU

501 Curricular Adaptations for the Disadvantaged (3) Curricular innovations that attempt to aid the culturally disadvantaged in developing

skills necessary for maximum personal adjustment to society. Survey of urban problems and their relationships to inner-city schools.

502 Human Relations in the School and Community (3) Intensive study of the inner-city community and its close relationship with the

school society. Analysis of prejudice and its implication in community and school power structures.

590 Independent Study (1-3)

599 Workshop in Urban Education (3)

Criminal Justice

200 Ruby Jones Hall West Chester University West Chester, PA 19383 610-436-2647

Dr. Greenberg, Chairperson Dr. Metz, Coordinator of Graduate Studies

PROFESSOR

Jana L. Nestlerode, J.D., Widener University

ASSOCIATE PROFESSORS

Saul H. Greenberg, J.D., University of Baltimore Harold W. Metz, Ed.D., West Virginia University

ASSISTANT PROFESSORS

Mary P. Brewster, Ph.D., Rutgers University Reginald Nealy, M.H.S., Lincoln University

Program of Study

West Chester University offers a Master of Science degree in criminal justice which is:.

- multidisciplinary and flexible (provides thesis and nonthesis options),
- staffed by experienced professionals,
- · career oriented, and
- the basis for pursuit of further graduate study.

Admission Requirements

All students must meet the general requirements for admission to a graduate degree program at West Chester University. Applications are processed by the Office of Graduate Studies. Upon receipt of all necessary credentials, Graduate Studies will forward the materials to the Department of Criminal Justice for further consideration and approval. The department places special emphasis on the "Academic and Professional Goals Statement" found within the application, and requires that all applicants take the MAT Examination. Letters of reference are not necessary.

Degree Requirements

Prior to receiving the Master of Science degree in criminal justice, all candidates must:

- 1. file an application for admission to candidacy for the degree (must be filed in the Office of Graduate Studies and Sponsored Research after completion of 12 - 15 graduate credits),
- 2. complete a minimum of 36 semester hours of course work with a minimum cumulative GPA of 3.0 (based on a 4.0 system), and
- 3. pass a comprehensive examination.

Curriculum

I. Courses for Research Report Track (Nonthesis)

A. Required (6 credits)

CRJ 508 Research, Design, and Analysis

(36 credits)

COURSE DESCRIPTIONS CRIMINAL JUSTICE Symbol: CRJ

500 Evolutionary and Comparative Justice (3) This course is intended to aid the graduate student in understanding the evolutionary influences on the American criminal justice system. Comparisons with simpler, more peaceful societies will be used to analyze the advancement of law and justice. 503 Criminal Behavior and the Law (3) This course is

designed to help the student understand behavior by comparing criminal with normal behavior. A survey course, it reviews types of abnormal behavior and mental disorders, methods of diagnosis, and treatment and resolution of internal personal conflicts. Also included is an understanding of criminal behavior as it applies to abnormality. 504 Resolution of Internal Personal Conflicts (3) This course assists students in developing personal effectiveness in group situations. Emphasis will be on the development of competence in group leadership, ability to translate the group experience into positive decisions about self and environment, and the ability to recognize changes that have affected one's life. The knowledge gained from this course will help the student in relating to other per-

505 Nature of Crime and Delinquency (3) This course is a survey of the historical and contemporary attempts to explain the phenomena of crime and criminal behavior from the perspectives of sociology, psychology, economics, biology, and law. Emphasis will be placed on contemporary theories and the analysis of evidence supportive of various theoretical positions.

sons in their personal, social, and vocational life.

506 Criminal Justice Management (3) This course is intended to aid in the instruction of graduate students who are potential candidates for administrative positions. It brings together the most appropriate concepts from the various approaches and problems to management, e.g., staffing, decision making, motivation, leadership, communications, and control.

507 Justice and Professional Ethics (3) This course is designed to identify and examine ethical issues among practitioners and students in the criminal justice field. Such issues include the discretionary power of arrest, the use of deadly force, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment.

508 Research Design and Analysis (3) This course is intended to introduce the graduate student to the process of social research. It discusses research concepts such as problem identification, data collection, data analysis, hypothesis testing, and the development of conclusions and recommendations.

C. Electives (18 credits) Selected under advisement

2. Courses for Thesis Track

CRI 600 Proseminar

(36 credits)

A. Required (9 credits)

CRJ 508 Research, Design, and Analysis CRJ 610 Thesis

B. Choose any four of the following (12 credits)

CRJ 503 Criminal Behavior and the Law

CRJ 507 Justice and Professional Ethics CRJ 509 Criminal Jurisprudence

CRJ 505 Nature of Crime and Delinquency

CRJ 500 Evolutionary and Comparative Justice

B. Choose any four of the following (12 credits) CRJ 500 Evolutionary and Comparative Justice CRJ 503 Criminal Behavior and the Law

CRJ 505 Nature of Crime and Delinquency CRJ 507 Justice and Professional Ethics

CRJ 509 Criminal Jurisprudence

C. Electives (15 credits) Selected under advisement

509 Criminal Jurisprudence (3) This course examines the complex concepts and principles of criminal law and procedure. The foundations of these disciplines will be initially reviewed, followed by a more comprehensive and incisive analysis and investigation of the difficult issues which have evolved through decisions of the United States Supreme Court. Supreme Court jurisprudence is examined and contrasted with the jurisprudence of the Pennsylvania courts.

510 Operational and Strategic Planning (3) This course will examine the types of plans which are long term, wide ranging, and critical to the organization's success. The study of missions, goals, and outcomes will be emphasized.

520 Major Case Management (3) This course introduces some of the investigative and administrative techniques used in major crimes. Focus will be placed on early recognition of crime dimensions and the precise applications and control of available personnel, equipment, and resources.

522 Occupational Crime (3) This course analyzes the usually nonviolent criminal conduct variously described as white-collar crime, official corruption, systematic crime, corporate crime, or violations of trust that are characterized by calculation, deceit, and personal enrichment in one's job or profession. The influence of organized crime also is explored.

524 Juvenile Law (3) This course will bring together the leading cases that have reached the Supreme Court, as well as other important federal and state court decisions relating to the juvenile justice process.

526 Policing in America (3) This course is designed to examine current policing strategies and political issues that have developed as a result of those strategies. It also will explore the future of policing in America and will present several interdisciplinary approaches to new theoretical perspectives

530 Interviewing and Counseling Techniques in Criminal Justice (3) In this course, techniques of counseling applicable to law enforcement and corrections officers are explored. Areas of study include the initial interview, interrogation, handling the informer, manipulative behavior of offenders, report writing, and the exit interview. Role playing and sociodrama are used

535 Assessment Methods in Criminal Justice (3) This course will develop one's ability to understand, recognize, describe, and interpret psychometric measures associated with juvenile and adult offenders. The student will develop an understanding of the use of tests in the criminal justice field.

♦555 Topical Seminar in Criminal Justice (3) This course will provide an intensive examination of a selected area of study in the field of criminal justice.

Topics will be announced at the time of offering. This course may be taken more than once when different topics are presented.

560 Applied Legal Studies (3) This course presumes a sophisticated working knowledge of criminal law and procedure (successful completion of CRJ 509). The course will examine selected factual accounts of criminal law and process. Through critical examination and analysis of these cases, the student will be able to understand the practical realities of the criminal justice system, and to compare theory and philosophy with practice.

566 Contemporary Issues in Corrections (3) This course is designed to analyze contemporary issues in the area of corrections. Such issues will include flattime sentencing, private corrections, diversion, prison industries, inmate unions, and the elimination of

570 Women, Elderly, and Crime (3) This course is intended to introduce graduate students to the specific problems and conditions associated with female and elderly crime and victimization. The course will focus on the criminology, the law, and the response of the criminal justice system to the uniqueness of women and the elderly.

582 Controversial Criminal Jurisprudence (3) This course presumes a sophisticated working knowledge of criminal law and procedure (successful completion of CRJ 509). In provides an in-depth analysis of the Supreme Court's historical and contemporary approach to the most controversial issues of criminal law and procedure. The perspectives and arguments will be examined through the study and analysis of U.S. Supreme Court cases.

590 Practicum (1-6) A field experience (internship) program for preservice students only.

599 Independent Studies in Criminal Justice (1-3) This course will entail research projects, reports, and readings in criminal justice. Approval of the department chairperson is required.

600 Proseminar (3) Those students taking the nonthesis track will be expected to participate in a proseminar. The end result of this seminar will be a completed research paper evaluated on the basis of selection of topic and quality of research. PREREQ: CRJ 508.

610 Thesis (6) Bound and shelved in the library, the thesis represents the student's ability to plan, organize, and direct a research effort designed to discover, develop, or verify knowledge. Only for those students taking the thesis track.

Transfer Credits (1-6)

[♦] This course may be taken again for credit.

Earth Science—See Geology and Astronomy Economics—See Business Elementary Education—See Childhood Studies and Reading

English

541/531 Main Hall West Chester University West Chester, PA 19383 610-436-2745 / 436-2822

Mr. Peich, *Chairperson*Dr. Sabol, *Coordinator of Graduate Studies*

PROFESSORS

Michael W. Brooks, Ph.D., University of Toronto
Joseph Browne, Ph.D., University of Pennsylvania
John L. Gaunt, Ph.D., University of Maryland
Paul D. Green, Ph.D., Harvard University
John P. Kent, Ph.D., University of Illinois
Elizabeth Larsen, Ph.D., University of Wisconsin-Milwaukee
Dwight L. McCawley, Ph.D., University of Illinois
Lynette McGrath, Ph.D., University of Illinois
Kostas Myrsiades, Ph.D., Indiana University
C. James Trotman, Ed.D., Columbia University
Robert H. Weiss, Ph.D., Temple University

ASSOCIATE PROFESSORS

Christopher Buckley, M.F.A., University of California-Irvine T. Obinkaram Echewa, Ph.D., Syracuse University William D. Fordyce, Ph.D., Harvard University Alan W. France, Ph.D., Texas Christian University Claude Hunsberger, Ph.D., University of Wisconsin-Madison John T. Kelly, Ph.D., University of Oklahoma Avis G. McDonald, Ph.D., Macquarie University Garrett Molholt, Ph.D., University of Wisconsin-Madison Michael A. Peich, M.A., University of Pennsylvania William G. Prater, Ph.D., Ohio University Geetha Ramanathan, Ph.D., University of Illinois C. Ruth Sabol, Ph.D., University of Wisconsin-Madison Judith Scheffler, Ph.D., University of Pennsylvania Carol Shloss, Ph.D., Brandeis University Luanne Smith, M.F.A., Pennsylvania State University John W. Ward, Ph.D., University of Delaware

ASSISTANT PROFESSORS

Robert P. Fletcher, Ph.D., University of California, Los Angeles Dennis Godfrey, Ph.D., University of Michigan Jane E. Jeffrey, Ph.D., University of Iowa Deidre A. Johnson, Ph.D., University of Minnesota Paul L. Maltby, Ph.D., Sussex University John T. Newcomb, Ph.D., Duke University Patricia A. Pflieger, Ph.D., University of Minnesota Christopher J. Teutsch, Ph.D., University of Wisconsin-Milwaukee

Cheryl L. Wanko, Ph.D., Pennsylvania State University

Program of Study

The Department of English offers the Master of Arts in English. The Master of Arts permits the student to attain a number of goals. It furthers scholarship and learning in liter-

ature, language, and writing, providing the student with experience in critical reading and writing skills; the M.A. may be a preface to doctoral study or provide a foundation for teaching in high schools, community, or junior colleges. The Department of English also participates in an interdisciplinary program leading to the Master of Arts in Teaching English as a Second Language. (See Teaching English as a Second Language.)

In addition, the Department of English welcomes students who wish to take courses for professional growth and provides assistance and advice to post-baccalaureate students wishing to acquire secondary teaching certification in English.

Admission Requirements

The applicant to the M.A. program in English must (1) meet the general requirements for admission to degree study at West Chester University (see appropriate pages at the beginning of the Graduate Catalog); (2) submit a 5-6 page writing sample discussing a piece of literature (not creative works, news releases, or journalistic reports); (3) submit results of the General Aptitude Test of the Graduate Record Exam; (4) satisfy other departmental admission requirements established in consultation with the graduate coordinator; (5) take additional graduate and/or undergraduate courses when considered necessary. Normally, applicants who do not have a strong undergraduate record in English literature may be expected to take additional courses for full admission into the M.A. program in English.

The applicant seeking secondary English certification only must apply through the Office of Graduate Studies to the Department of Counselor, Secondary, and Professional Education and must have the transcripts evaluated by both the School of Education and the Department of English. The general requirements for admission include items (1) and (2) listed under "Admission Requirements for Degree Students" found at the beginning of the Graduate Catalog.

MASTER OF ARTS IN ENGLISH

(33 semester hours)

Required

9 semester hours

ENG 500 and ENG 501 (or equivalent methods and theory courses as required for different concentration options listed under Option II) to be taken before the completion of 12 semester hours of graduate credit

ENG 620 M.A. Essay (about 40 pages) to be completed at the end of course work under the direction of an adviser *selected in consultation* with the graduate coordinator. An oral defense of this essay also will be required.

Course Selection Options

24 semester hours

In addition to the three required courses specified above, all students will take eight courses selected in consultation with the graduate coordinator according to one of the following options:

OPTION I

- 1. any medieval British course
- 2. any 16th/17th-century British course
- 3. any Restoration/18th-century British course
- 4. any 19th-century British course
- 5. any 20th-century British course
- 6. any pre-20th-century American course

- 7. any 20th-century American course
- 8. a free elective chosen in an area relevant to the topic of the M.A. Essay

Option 1 is recommended for students who do not have a strong undergraduate record in English. Option 1 is also suggested for students planning to pursue the Ph.D. in literature.

OPTION II

- 1) four courses chosen from four of the areas listed above; students whose concentration area is composition and rhetoric will take three courses chosen from three of the areas listed above and one English language course. The composition and rhetoric concentration, however, is not currently available.
- 2) four courses chosen in a concentration area, such as creative writing; comparative literature; medieval; Renaissance; 18th-century, 19th-century, 20th-century British and/or American; women's literature; African-American and ethnic literature; linguistics, etc. In some concentrations, the methods and theory courses will be specific to the concentration. Concentrations may be proposed by students, but they should be chosen early in the student's program and must be approved by the graduate coordinator. Please be aware that concentrations may be available only if student enrollment in courses necessary to the concentrations is sufficient. The M.A. essay should be written in the area of the concentration.

One course in the concentration may be a compatible course from another department. For more information concerning graduate work in English, including course listings for possible concentrations and precise specifications for the M.A. essay, see the Handbook for Graduate English Studies and the Guidelines for Completing the M.A. Essay and the Oral Discussion available from the English graduate coordinator.

SECONDARY ENGLISH CERTIFICATION OPTION

Post-baccalaureate students seeking certification in secondary English must meet the equivalencies of an undergraduate secondary education major in English. Generally, the following courses are required by the Department of English for certification. (See the Department of Counselor, Secondary, and Professional Education for its requirements.) The Department of English normally accepts equivalent courses from colleges or universities accredited in the United States or their equivalent from schools in other countries.

Contact the English graduate coordinator for an evaluation of transcripts from other accredited schools.

Required

Two Writing Courses

- 1. ENG 120 Effective Writing I (or the equivalent)
- 2. ENG 121 Effective Writing II (or the equivalent)
 Three Linguistics Courses
- 3. ENG 230 Introduction to Linguistics (or ENG 330, LIN 501, LIN/LAN 503, or LIN 512)
- 4. ENG 331 Structure of Modern English (or ENG 575, LIN 504, 505)
- 5. ENG 335 History of the English Language (or ENG 339, 577, 579)

One Methods Course

6. ENG 390 Teaching English in the Secondary School (PREREQ: EDM 300, EDP 351, EDS 306, and ENG 230, 331, and 335)

Nine Advanced Literature Courses ("Advanced" means courses determined to be upperlevel undergraduate or graduate courses. At West Chester the courses that qualify are numbered in the 300s, 400s, 500s, or 600s.)

- 7. a literary theory course
- 8. a medieval British course
- 9. a 16th/17th-century British course
- 10. a Restoration/18th-century British course
- 11. a 19th-century British course
- 12. a 20th-century British course
- 13. a pre-20th-century American course
- 14. a 20th-century American course
- 15. Another advanced course

For more information concerning secondary English certification for post-baccalaureate students, contact the Department of English graduate coordinator.

COURSE DESCRIPTIONS ENGLISH

Symbol: ENG

GENERAL TOPICS AND THEORY

500 Introduction to the Profession (3) An introduction to the methods and materials of research used by scholars of English and American literature. An introduction to current issues and debates in the profession and to the history of the profession.

- 501 Literary Theory (3) Study of various methods of literary theory and analysis; the application of these methods to specific works of literature.
- 502 History of Criticism (3) A historical study of literary criticism and aesthetic theory from Plato and Aristotle to the present.
- 503 Feminist Literary Criticism (3) A study of the development of feminist criticism and different schools of feminist literary theory. Application of feminist theory to specific texts.

507 Literature Seminar (3) Variable topics announced each time the course is offered.

ENGLISH LITERATURE

517 Beowulf (3) An analysis of the full poem in Old English. Emphasis on the artistic, linguistic, and historic values. PREREQ: ENG 584 or equivalent.

- 518 Chaucer (3) A study of the Canterbury Tales and Troilus and Criseyde.
- 519 I6th-Century Poetry and Prose (3) A survey of the major poetry and prose written in England during the Tudor period from Skelton to Shakespeare.
- 520 Spenser and Milton (3) The major works of Spenser and Milton studied in relation to the intellectual climate of the Renaissance. Emphasis on *The Faerie Queene* and *Paradise Lost*.
- 521 Major Renaissance Writers (3) An in-depth study of major figures in the Renaissance. Intellectual background and literary influences. Variable topics.

- 522 English Drama to 1642 (3) A survey of English drama (exclusive of Shakespeare) from its medieval beginnings to the closing of the theatres in 1642.
- 523 Shakespeare's Sisters (3) Poetry, prose, and drama by Renaissance women writers. Includes Elizabeth I, Mary Wroth, Elizabeth Cary, Amelia Lanier, Katherine Philips, Bathsua Makin, and others. Topics addressed include women's education, attacks on and defenses of womankind, love poetry by men and women, heroic women, and "a woman's place."
- 525 Shakespeare's Tragedies and Histories (3) Histories and tragedies read with analysis of dramatic and poetic effects.
- 526 Shakespeare's Comedies and Poems (3) The comedies analyzed. The poems read in relation to Shakespeare's developing dramatic and poetic power.
- 527 17th-Century Poetry and Prose (3) An

in-depth study of the major poets and prose writers from Donne to Milton.

- 529 18th-Century Poetry and Prose (3) A study of the literature of the era, with emphasis on the cultural context, aesthetic theory, and the evolution of poetic techniques.
- 530 Restoration and 18th-Century Drama
 (3) Critical history of the British drama from the re-opening of the theatres to Sheridan.
 Major playwrights and study of theatre history.
- 531 18th-Century British Novel (3) A study of the rise of the novel and its development in the 18th century. Defoe, Richardson, Fielding, Smollett, and Sterne.
- 533 Romantic Poetry and Prose (3) The poetry and prose of the early 19th century with emphasis on the five major poets (Wordsworth, Coleridge, Byron, Shelley, and Keats) and three major essayists (Lamb, Hazlitt, and De Ouincey).
- 534 Victorian Poetry (3) A study of Tennyson, Browning, Arnold, Hopkins, Swinburne, and Hardy.
- 535 Culture and Society in the 19th Century (3) A study of Victorian literature against its social and intellectual background.
- 536 19th-Century British Novel (3) The British novel from Scott to Hardy.
- 537 20th-Century British Novel (3) A study of the British novel from 1914 to the present. Among the novelists to be studied are Conrad, Ford, Forster, Lawrence, Woolf, Waugh, Green, Murdoch, Spark, and Golding.
- 538 20th Century British Poetry (3) A comprehensive study of the major British poets from 1890 to the present: Dowson, Housman, Hardy, Owen, Yeats, Eliot, Thomas, Lawrence, and Auden.
- 539 Major 20th-Century Irish Writers (3) A comprehensive study of significant Irish writers of the 20th century: Yeats, Joyce, O'Casey, Synge, O'Connor, O'Faolain, Beckett, and Shaw. 540 Joyce and Beckett (3) Detailed critical analysis of Joyce's Dubliners, A Portrait of the Artist as a Young Man, Exiles, and Ulysses; Beckett's drama and novels.
- 541 20th-Century Drama (3) Principal British and American playwrights from Shaw to Pinter and Albee.
- ♦ 544 Seminar in English Literature (3) Topic announced when offered.
- ♦ 545 Medieval Women's Culture (3) This course studies writings by medieval women and their contribution to the development of medieval culture.

AMERICAN LITERATURE

- ♦ 547 American Literary Movements (3) Major movements in the development of American literature. Influence of leading writers on literary concepts, trends, and critical dicta. Topics announced when offered.
- 548 Hawthorne and Melville (3) A study of their works and representative literary criticism.
 549 Twain and James (3) A study of their works and representative literary criticism.

- 551 Hemingway and Faulkner (3) The works of Hemingway and Faulkner and the literary relationship of these works.
- 557 Major 20th-Century American Poets (3) A close study of several major, modern American poets.
- 558 20th-Century American Writers (3) Major writers and literary movements from 1900 to the present. Topics announced when offered.
- 560 Urbanism and the American Imagination (3) A study of the impact of urbanism on American literature and art.
- 562 Modern African-American Literature (3) An intensive study in themes and trends in modern African-American literature.
- 563 African-American Women Writers in America (3) Writings from the Colonial period to the present. A survey of the forms of expression used by these writers and the themes of gender, race, and class that challenge and redefine the image of women in an American and African-American context.
- ♦ 564 Seminar in American Literature (3) Variable topics announced when offered.

COMPARATIVE LITERATURE

- ♦ 565 Comparative Literature Seminar (3) Studies in international, literary, and/or cultural relations; the characteristics and relationships of literary themes, types, and genres. Topics announced when offered.
- 566 Comparative Literature: The Greek Myths (3) The role of Greek myths and their treatment in Western literature.
- 568 20th-Century Women Poets (3) The study of a significant number of modern women poets from Amy Lowell to Diane Wakoski. Discussion of commentary by women poets about the experience of writing poetry. Although the emphasis is on English and American poets, representatives from other cultures will be included.
- 571 Colonialism and the 20th-Century Novel (3) An examination of the relationship of the colonialist theme and modernist techniques in the novel

LANGUAGE

- 575 Structure of Modern English (3) A detailed analysis of the modern descriptive approach to the study of English grammar and how it compares with the traditional approach. 576 English as a Second Language (3) Implications of the nature of language in teaching English to speakers of other languages. Methods and materials for teaching English as a second language. PREREQ: LIN 501 or permission of the instructor.
- 577 History of the English Language (3) Review of the major influences on the development of the English language. PREREQ: LIN 501 or LIN 503.
- 578 Modern English (3) A study of the development of the English language from 1450

- to the present (exclusive of American English).
 579 Studies in American English (3)
 Historical processes in the development of
 American and British English. Regional and
 social dialects of American English. Usage and
 sociolinguistics.
- 580 English Language Workshop (1-4) Workshop to survey recent developments and newer concepts in English linguistics for teachers. Variable structure and credit by arrangement with individual school districts.
- 584 Old English Language and Literature (3) An introductory study of the language through a reading of selected religious and secular poetry and prose.
- 585 Middle English Language and Literature (3) An introductory study of the language (1150- 1450) through a reading of selected texts (exclusive of Chaucer).
- ♦ 589 Language Seminar (3) Studies in English language and linguistics. Topics announced when offered. PREREQ: L1N 501 or the equivalent.
- ♦ 590 Independent Study (1-3) Research projects, reports, and specialized readings. PRE-REQ: Approval of instructor and coordinator of English graduate studies.

TEACHING SKILLS

- 591 Modern Techniques for the Teaching of English (3) Techniques of teaching language arts, composition, and literature in the secondary school. Practice in planning and designing units and courses of study. Exploration into the latest research in teaching English.
- 592 Literature for the Elementary School (3) The content and approach of the literature program in the elementary school.
- 593 Literature for the Secondary School (3) An examination of the literary interests of the secondary school student. A discussion of the works of major writers who appeal to the teenage student.

COMPOSITION AND RHETORIC

Please note that the Compostion and Rhetoric concentration is not currently available.

- ♦ 508 Writing Seminar (3) Experience in nonfiction prose writing; discussion and development of major projects.
- 594 Directed Studies in Composition and Rhetoric (3) Offers students systematic guidance and instruction in a specially formulated project involving scholarly or empirical research in composition.
- 595 Teaching Composition (3) A survey of developments and research in composition. Focus on the writing process, grading and evaluation, case approaches to writing assignments, writing across the curriculum, and remedial and developmental writing.
- ♦ This course may be taken again for credit.

596 Composition and Rhetoric (3) Survey of rhetoric and composition theory. Frequent practice in writing.

600 Tutoring Composition (3) Theory and practice of teaching basic writing in the tutoring environment.

CREATIVE WRITING

- 504 Methods and Materials of Publishing (3) This course is designed to familiarize graduate students with the history of the book and to provide them with the opportunity to gain practical experience in book production.
- ♦ 509 Writing Seminar in the Novel 1 (3) A course in the writing and preparing of booklength manuscripts (novels, novellas, and "nonfictional" novels) with the intention of submission for publication. Also includes coverage of fictional aspects and techniques used in writing memoirs, biography, and current history.
- ♦ 510 Writing Seminar in the Novel II (3) A continuation of ENG 509.
- ♦ 601 Creative Writing Seminar (3) A specialized writing seminar. Topics announced when offered. Longer prose works, short story, fantasy/ science fiction, narrative verse, lyric/meditative verse, etc. A portfolio is required at the end of the course.
- ♦ 602 Creative Writing: Directed Studies (3) A course of individual study for students who have completed two workshops in a single genre. Concentrated work in a special poetry or prose topic.
- ♦ 605 Poetry Workshop 1 (3) Experience in writing various types of poetry: traditional forms, narrative, lyric/meditative, etc. Readings in traditional and contemporary poetry and poetics. A final portfolio required.
- 606 Poetry Workshop II (3) Extended work in poetic forms with additional emphasis on contemporary poetry in translation. A critical paper on contemporary poetry and poetics and a completed portfolio are required.
- ♦ 608 Short Story Workshop 1 (3) Techniques of composing the short story with emphasis on its elements of form: point of view, diction, characterization, and dialogue. Readings in traditional and contemporary criticism and short stories. Completed portfolio of revised works is required.
- ♦ 609 Short Story Workshop II (3) Extended work in the short story form with opportunities for exploring more experimental forms of short fiction. Additional readings in short fiction and criticism. A critical paper on a contemporary short story writer is required.

M.A. ESSAY

♦ 620 M.A. Essay (3) Required final extended paper (about 40 pages) written under the direction of an adviser. Further details available in the *Graduate English Studies Handbook*. Oral defense required.

SPECIAL PROGRAM

PENNSYLVANIA WRITING PROJECT Symbol: PWP

The courses described below are intended to be taken primarily by teaching professionals who are seeking to enhance their writing instruction capabilities while earning graduate credit. Only one PWP course (with the approval of the English graduate coordinator) will apply to the West Chester University master's degree in English and only if students are in the composition and rhetoric concentration. Students interested in applying PWP courses toward the M.Ed. in secondary education must consult with their adviser or the graduate coordinator of their program to secure prior approval.

- ♦ 501 The Writing Process (1) A practical introduction to the writing process approach to teaching writing. Permission of instructor required.
- ♦ 502 Strategies for Teaching Writing (2-3) This basic course is designed to familiarize teachers of writing with successful practices and related research and theory in the field. Permission of instructor required.
- 503 Strategies for Teaching Writing II (3) Practical and research-based skills of prewriting, writing conferences, revision, editing, and evaluation. PREREQ: PWP 502 or PWP 510 and permission of instructor required.
- ♦ 504 Holistic Assessment of Writing (1) Theory and practice of rapid and reliable assessment of large numbers of writing samples as used in schools and colleges. Permission of instructor required.
- ♦ 505 Writing in the Content Areas (1) Participants will explore ways of motivating students to write about academic areas, design effective assignments, and use writing process methods to improve learning in all subjects. Topics include learning-centered writing, evaluation, and classroom management of writing. Permission of instructor required.
- ♦ 506 Computers and Writing (Beginning)
 (1) Microcomputer applications at all stages of the writing process. Basic awareness, demonstrations, and hands-on experience will be emphasized. Permission of instructor required.
- ♦ 507 Computer and Writing (Intermediate I) (2) An introduction to computer programs useful at all stages of the writing process and to ways that teachers can use, develop, and evaluate computer-assisted instruction (CAI) in writing. Permission of instructor required.
- ♦ 508 Computers and Writing (Intermediate II) (3) A practical and theoretical overview of the field, with demonstrations of computer courseware and hands-on experience in prewriting and planning, word processing, revising, editing, skill-building, evaluation, and classroom management. Permission of instructor required.

- ◆ 509 Computers and Writing (Advanced)
 (4) Covers pertinent points of composition training. Stages in the composing process are related to software packages and computer-assisted teaching techniques. Theoretical and practical questions will prepare teachers of writing to incorporate useful computer assistance into their classrooms and to offer demonstrations to other teachers. Permission of instructor required.
- 510 Writing, Reading, and Talking Across the Curriculum (3) Rationale and strategies for critical language experiences in all subjects. Supports PCRP2 state curriculum framework. Permission of instructor required.
- 511 Writing Assessment (3) Large-scale and classroom writing assessment; implications for writing instruction. Permission of instructor required.
- 512 Teacher-Research Seminar (3) Individual research projects for classroom studies of students as writers. Permission of instructor required.
- ♦ 513 PCRP2 Seminar on Writing and Thinking Across the Curriculum (3) Critical exploration of Pennsylvania state curriculum framework for language and learning. PREREQ: PWP 510 and permission of instructor required.
- 515 Workshop in Administering Writing Programs (1) Creating and maintaining successful writing and language arts programs. Permission of instructor required.
- ♦ 517 Workshop in Writing Assessment (1) Different assessment models and their relation to instruction, with information from the Pennsylvania Writing Assessment. Permission of the instructor required.
- ♦ 520 Teaching Literature (3) Focus on instructional practices that reflect current theories and approaches to classroom use of literature, K-12. Permission of instructor required.
- ♦ 521 Seminar in Teaching Literature (3) Intensive study to develop advanced skills in teaching literature. Permission of instructor required.
- ♦ 597 Seminar for Master Teachers (6) Participants develop advanced skills in the teaching of writing, receive training as in-service "teacher/consultants," and develop relationships with other writing teachers who seek to improve their teaching and writing. Permission of instructor required.
- ♦ 599 Workshop in English (1-6) Topic varies. Each workshop will focus on specific issues and problems in the teaching of writing and will introduce appropriate instructional materials and techniques. Permission of instructor required.

[♦] This course may be taken again for credit.

Foreign Languages

109 Main Hall West Chester University West Chester, PA 19383 610-436-2700

Mr. Gougher, Chairperson

Dr. Patton and Dr. Williams, Assistant Chairpersons and Coordinators of Graduate Studies

FRENCH

ASSOCIATE PROFESSOR

Rebecca Pauly, D.M.L. Middlebury College

ASSISTANT PROFESSORS

Anne-Marie Moscatelli, Ph.D., Bryn Mawr College Michel H. Sage, Ph.D., University of California at Berkeley

GERMAN

ASSOCIATE PROFESSOR

Ronald L. Gougher, M.A., Lehigh University

ASSISTANT PROFESSORS

Stephen G. Gilmour, Ph.D., *University of Minnesota* Margarete Landwehr, Ph.D., *Harvard University*

LATIN

ASSOCIATE PROFESSOR

Erminio Braidotti, Ph.D., University of Pennsylvania

INSTRUCTOR

John P. Rosso, M.A., University of Pennsylvania

SPANISH

PROFESSORS

Stacey Schlau, Ph.D., City University of New York Jerome M. Williams, Ph.D., Yale University

ASSOCIATE PROFESSORS

Erminio Braidotti, Ph.D., University of Pennsylvania Jorge Escorcia, M.A., Boston University Constance Garcia-Barrio, Ph.D., University of Pennsylvania Andrea Varricchio, Ph.D., Temple University

ASSISTANT PROFESSORS

Celia Esplugas, Ph.D., University of Toledo Paul Seaver, Ph.D., University of Maryland

Programs of Study

The Department of Foreign Languages offers two degree programs, one leading to the Master of Education in French, German, Latin, or Spanish, and the other to the Master of Arts in French or Spanish.

The department also cooperates in offering an interdisciplinary program leading to the Master of Arts in Teaching English as a Second Language. (See Teaching English as a Second Language.)

MASTER OF EDUCATION IN FRENCH, GERMAN, LATIN, OR SPANISH

(34 semester hours)

The M.Ed. program requires Methods and Materials of Research in Second Language Education (LAN 500), Techniques of Second Language Teaching (LAN 503), and 18 semester hours in the area of concentration. In Spanish, the concentration may be designed to the student's particular interest and needs. In French and German it must include one course each from Groups A, B, C, and D. In Latin the 18-hour concentration is developed from Groups A and B, under advisement. Majors in any of the languages also may elect from "Courses Common to All Languages" (see below) for the concentration.

The Department of Foreign Languages has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's adviser and/or department chairperson: GER 401-412, inclusive; LAT 401-406 and 410-412, inclusive; RUS 401-403 and 410-412, inclusive; in French and Spanish, any two courses at the 400 level. No more than six credits of 400-level courses may be used to satisfy degree requirements.

At least 12 semester hours of course work in education are required. (See pages 47-48.) Currently, the courses required for state secondary certification in foreign languages include EDF 589, EDP 550, EDM 501 or 502, EDP 531, EDS 599. All M.Ed. students should consult with an adviser in the Department of Counselor, Secondary, and Professional Education.

FRENCH	GERMAN
Group A	Group A
FRE 510, 511, 512, and 513	GER 513 and 514
Group B	Group B
FRE 501, 514, and 515	GER 515
Group C	Group C
FRE 516 and 520	GER 516, 517, 518, and 520
Group D	Group D
FRE 520 and 521	♦ GER 519

LATIN

Group A Group B
LAT 503, 511, 512, and 514 LAT 515, 521 through 531,

and 535 and 536

MASTER OF ARTS IN FRENCH OR SPANISH

(30 semester hours)

The M.A. programs in French or Spanish provide for either a thesis or nonthesis option. Both require 21 semester hours. In French the 21 semester hours must be selected from Groups A, B, C, and D above. The thesis program includes LAN 610 (six hours) and an additional elective (three hours) in the area of concentration. The nonthesis option includes nine hours of electives in the area of concentration.

In Spanish the M.A. program requires SPA 510 (three semester hours) and LAN 610 (three semester hours), plus 24 semester hours evenly distributed between Peninsular and Latin American literatures. The nonthesis option includes SPA 510 (three semester hours), 21 semester hours from Peninsular and Latin-American literatures, plus six semester hours of electives in the area of concentration (if one is chosen).

The Department of Foreign Languages has approved the following undergraduate courses for graduate credit when scheduled with the

[♦] This course may be taken again for credit.

electives for both options also may be from courses common to all languages. (See above.) LAN 500 (or LAN 550) are strongly recommended. The Department of Foreign Languages also has approved any two 400-level undergraduate courses for graduate credit, when scheduled with the approval of the student's adviser, graduate coordinator, and/or department chairperson.

The candidate for the M.A. must pass a reading examination in a second foreign language or must have taken and passed at least one graduate-level course in a second foreign language.

Comprehensive examinations are required for both the Master of Arts and the Master of Education.

COURSE DESCRIPTIONS COURSES COMMON TO ALL LANGUAGES Symbol: LAN

500 Methods and Materials of Research in Second Language Education (3) Techniques of research in loreign language education, including sources, design, interpretation, evaluation, and

reporting of data.

502 Second Languages in the Elementary School (3) Problems in teaching second languages in the elementary school. Curriculum design, bilingual education, classroom techniques, articulation, materials, and testing. Preferably, LIN 501 or equivalent should precede LAN 502.

503 Techniques of Second Language Teaching (3) Advanced course in recent theoretical bases, methods for teaching beginning and advanced levels, curriculum design, and evaluation.

PREREQ: LIN 501 or equivalent.

504 Use of Media in Language Teaching (3) Role of media in language instruction including the tape recorder, language laboratory, television, and the computer.

505 Introduction to Bilingual/Bicultural Education (3) Introduction to history, philosophy, current status, and future directions of bilingual/bicultural education. Survey of materials, tests, techniques, instructional processes, and instructional patterns. Overview of testing, placement, and pupil evaluation.

511 Roman Civilization (3) Roman civilization and its influences on Europe.

550 Seminar in Methods and Materials of Research in Language and Literature (3) The principal tools of research in the field of foreign language and literature. Methods of conducting and reporting research, emphasizing correctness of form and mechanics of scholarly writing.

560 Directed Studies (3) To provide an opportunity for students to pursue areas of study not regularly provided by the department. Focus of course to be announced when offered.

580 Seminar in Second Language Education (1-4) Specialized workshop seminar devoted to a particular area of foreign language education.

585 Institute in Second Language Education (4-8) In-depth study of a particular area of foreign language education.

590 Independent Study (1-3)

600 Research Report (1-2)

610 Thesis (6)

See also Linguistics (LIN)

FRENCH Symbol: FRE

501 Commercial French (3) A study of French economic and business systems, with extensive practice in business correspondence.

510 French Theater (3) Principal French dramatists analyzed against the social, political, literary, and critical backgrounds of their age.
511 Modernism in French Literature (3) Close

consideration of some prime innovative texts of fiction, poetry, lilm, and polemic as manifestations of the spirit and aesthetic of modernism.

512 French Narrative (3) A study of prose texts, their ethos, and their narrative techniques, from the epics and *contes* of the Middle Ages to the experimental works of the late 20th century.

513 French Poetics (3) An intensive survey of French poetry, its theory and practice, using models drawn from the whole tradition, from Villon to Bonnefoy.

514 Contemporary France (3) A study of France since 1945, with emphasis on current events and social changes.

515 French Civilization (3) A study of France since 1789, with emphasis on social, political, economic, and educational institutions.

516 Writing Literary Criticism: Theory and Practice (3) Study of various fields of literary theory, including structuralism, semiotics, Marxism, narratology, psychoanalytic criticism, and deconstruction. Techniques of textual interpretation.

♦ 520-521-522 Topics in French Literature and Language (3) Course topics courses will vary by semester and instructor, and may include titles such as genre studies, film study, women writers, francophone writers, the study of literary periods or movements, and structural and applied linguistics.

523 Translation Techniques (3) A theoretical and practical study of modes of lexical and syntactic transposition, from L1 to neutral zone to L2. Extensive practical exercise in diverse types of translation.

GERMAN Symbol: GER

513 Phonetics and Advanced Oral Practice (3) The sounds, forms, and structure of modern standard German, using recorded materials and selected texts.

514 Advanced Grammar and Stylistics (3) Stylistic qualities of modern German, analyzed in selected texts. Oral and written drill.

515 German Civilization (3) Social structure of Germany; evolution of its institutions; German achievements in the arts.

516 The Novelle (3) The German short story from Goethe to the present, including the German Feuilleton and the post-World War II writers.

517 German Lyric Poetry (3) Major representative poets of the 19th and 20th centuries.

518 Contemporary German Literature (3)
Post- World War II literature, including poetry and
prose, along with appropriate literary criticism.

♦ 519 Seminar (3) Small-group study of relevant topics in German literature and philology. 520 Age of Goethe (3) Works of Goethe, Schiller, and other contemporaries. Critical works dealing with the life of Goethe, Schiller, and others.

LATIN

Symbol: LAT

503 Techniques of the Teaching of Latin (3) Survey and analysis of texts and other materials

for teaching Latin. Recent methods for elementary and secondary levels. Curriculum for the secondary level.

511 Comparative Grammar and Syntax of Greek and Latin (3) The relation of Greek to Latin within the Indo-European family of languages. Survey of the external histories of Greek and Latin. Greek and Latin phonology and morphology with references to principles of syntax.

512 History of the Latin Language (3) Development of the Latin language from the earliest inscriptions to the ninth century A.D., with some consideration of the prehistoric language and people in Rome.

514 Advanced Latin Prose Composition and Translation (3) Intensive review of Latin syntax, with translation of English passages into Latin and vice versa.

515 Seminar in Greek and Roman Civilization (3) A study of literary texts and archaeological documents illustrative of the Greek mind and/or Roman genius.

521 Cicero's Philosophical Essays (3) Studies in the Somnium Scipionis, Tusculan Disputations, De Natura Deorum and De Officiis with reference to Cicero's political theory and practice.

522 Virgil: Eclogues and Georgics (3) Studies in the themes and methods of Virgil's Eclogues and Georgics.

524 Comedies of Plautus (3) Origins of "comedy of matters"; study of Plantian comedy and its influence on later writers of comedy.

526 Greek and Latin Epic (3) The Greek epic from Homer to Apollonius of Rhodes, and the Latin epic from Naevious to Virgil. Readings from the classical epics.

527 Roman Historiographers (3) Selections from Sallust, Caesar, Livy, Tacitus, and Suetonius. Origin, development, and influence of Roman historiography.

528 Roman Satire (3) History of Roman satire and the development of Lucilian satire. A comparative study of the satires of Horace, Persius, and Juvenal.

529 The Latin Novel (3) Emergence and development of the Latin novel. Readings in Petronius' Cena Trimalchionis, Seneca's Apocolocyntosis, the Pompeian Inscriptions, and Apuleius' Metamorphoses.

530 Medieval Latin Literature (3) Latin poetry and prose from the fourth to the 17th centuries, with emphasis on the acquisition of a good reading knowledge of medieval Latin in different periods and styles.

531 Latin Epigraphy (3) Latin inscriptions from the earliest period to the eighth century A.D. A study of the development of the Latin language.

535 Seminar in Interpretation of Latin Literature (3) Study of various modern approaches to Latin literature. Analysis of selected passages or themes from selected authors.

[♦] This course may be taken again for credit.

536 Literary Criticism in Antiquity (3) Study of selected authors or works with reference to both ancient and modern (e.g., Horace and Quintilian) criticism and interpretation.

SPANISH

Symbol: SPA

510 Applied Spanish Linguistics (3) A study of Spanish morphology, phonology, and syntax (sound, word, sentence formation). The structure of the language will be studied from a theoretical and practical perspective.

512 Advanced Spanish Grammar and Stylistics (3) An informal, rapid review of Spanish grammar, with emphasis on problems fundamental to the American classroom. Exercises include idiomatic expression, various levels of style, and translation

514 The Hispanic World (3) Major philosophical and artistic contributions of the Hispanic world to Western civilization. The social and economic institutions of the Hispanic world.

520 Medieval and Renaissance Literature (3) Analysis of major Spanish texts and authors from 1100-1500, including Mio Cid, la Celestina, Alfonso X, Manrique, Don Juan Manuel, Berceo, Encina, and Juan Ruiz.

530 Spanish "Comedia" of the Golden Age (3) Survey of the comedia before Lope de Vega; the contributions of Lope de Vega; Tirso de Molina and Ruiz de Alarcón; the Baroque theatre of Calderón de la Barca.

532 Spanish Literature of the Golden Age (3) Novel and poetry. Spanish literature of the 16th and 17th centuries: mysticism, poetry, novel.

533 Cervantes (3) Life and works of Miguel Cervantes Saavedra: Novelas ejemplares, Ocho comedias y otro entremeses, La Numancia, La Galatea, all of which lead to the study of the meaning, philosophy, and influence of Don Quixote.

535 19th-Century Spanish Literature (3) An analysis of the major movements of the century, including Romanticism, "Costumbrismo," Realism, and Naturalism.

536 The Generation of 1898 (3) The revitalizing forces which took hold in the late 19th century, and a study of the works of Unamuno, Azorín, Menéndez Pidal, Pio Baroja, Valle Inclan, Benavente, Martínez Sierra, and Rubén Dario.

537 20th-Century Spanish Literature (3) Introduction to representative works of 20thcentury Spanish literature. Authors studied include Arrabal, Cela, Delibes, Lorca, Goytisolo, Matute, Sender, and others.

541 Colonial Latin American Literature (3) A study of colonial Latin American literature within the context of conquest and colonization, with emphasis on religious, historical, and literary aspects of the New World as seen through primary authors and readings.

542 Modern Latin American Literature (3) Spanish-American literature, thought, and culture as revealed in outstanding works representative of major authors and movements from the

Independence to 1950 (including Romanticism, Modernism, Regionalism, and avant garde).

543 Contemporary Latin American Literature (3) A study of major authors and literary movements in contemporary Latin America, including magical realism, theatre of the absurd, and poetic movements.

544 Latin American Theatre (3) A study of theatre as a reflection of social realities and of dramatic movements and techniques in Latin America. The cultural history of the Latin American stage also will be examined.

545 The Latin American Novel (3) The development of the novel in Latin America. The colonial period, the period of independence, the romantic period; realism, modernism, criollismo,

546 The Black in Spanish-American Literature (3) The characterization of blacks in Spanish-American literature, and the political and social context of their portrayal.

547 Hispanic Women Writers (3) An examination of representative women authors and their prose, poetry, and theatre from the 17th century to the present in Spain and Spanish America.

549 Masterpieces and Movements in Spanish Literature (3) A seminar on the development of Spanish thought and artistic expression through selected masterpieces of literature and art.

◆ 556 Seminar I (3)◆ 557 Seminar II (3)

◆ This course may be taken again for credit.

Geography and Planning

207 Ruby Jones Hall West Chester University West Chester, PA 19383 610-436-2746

Dr. Rengert, Chairperson and Coordinator of Graduate Studies Mr. Bielski, Coordinator of Urban and Regional Planning in M.S.A.

PROFESSORS

Arlene C. Rengert, Ph.D., University of Pennsylvania John C. Tachovsky, Ph.D., University of Cincinnati Wesley W. Thomas, Ph.D., University of Cincinnati

ASSOCIATE PROFESSORS

F. Robert Bielski, M.A., University of Illinois, A.I.C.P., American Planning Association Charles W. Grassel, M.S., University of Pennsylvania

ASSISTANT PROFESSORS

George W. Fasic, M.S., Columbia University, A.I.C.P. (Director, Chester County Planning) James P. Lewandowski, Ph.D., Ohio State University Joan Welch, Ph.D., Boston University

Programs of Study

The Department of Geography and Planning offers two masters degrees: 1) the Master of Arts in geography and 2) the Master of Science in Administration, with a concentration in urban and regional planning. The latter is an interdisciplinary degree described under Master of Science in Administration.

The Master of Arts in geography is designed to develop skills and expertise useful in solving society's problems in areas such as land planning and management, conservation of resources, demographic change, and location of commerce and industry. It also prepares students for entrance into Ph.D. programs in geography, and in social studies education.

MASTER OF ARTS IN GEOGRAPHY

(33 semester hours)

1. Required Courses GEO 503, 505, and 509 9 semester hours

2. Thesis GEO 610 (up to) 6 semester hours

3. Elective Courses 18 semester hours Selected under advisement from geography, geology, mathematics, statistics, computer science, environmental health, or other appropriate disciplines.

4. Oral examination in defense of thesis (required)

MASTER OF SCIENCE IN ADMINISTRATION

Concentration in Urban and Regional Planning

(36 semester hours)

1. Administration Core (required) 18 semester hours ADM 501, 502, 503, 504, 505, 506, or 507

2. Urban and Regional Planning Core (required) 6 semester hours ADM 500 Methods and Materials of Research (3) GEO 525 Urban and Regional Planning: Theory and Practice (3)

3. Urban and Regional Planning Electives 12 semester hours (selected under advisement), including ADM 600, 612 GEO 502, 505, 506, 507, 509, 521, 524, 526, 527, 530, 534, 590, 610, and 615 PSC 542 and 544

- 4. Each student in this concentration will develop with the graduate coordinator a tailored contract of courses meeting the needs of the student. The individualized contract will address the background and career goals of the student.
- 5. Comprehensive examination (written) in concentration is required. The examination will be based on a selected bibliography of key works in the concentration. The bibliography will be provided at the time the student is admitted to the program.

COURSE DESCRIPTIONS GEOGRAPHY Symbol: GEO

♦ 502 Topical Seminar (3) Special topics in geography of planning not offered under existing,

regularly offered courses.

503 Seminar in Modern Geography (3) A survey of modern geographic research, with historical perspective. Attention is given to research methodology, and to the breadth of subfields and perspectives in the discipline.

505 Map Design (3) Methods and techniques of map design. Presentation of statistical data in map form. PREREQ: Consent of instructor.

506 Seminar in Physical Geography (3) This course examines aspects of the physical environment that must be considered when planning any site for urban, industrial, or suburban activity.

507 Maps and Aerial Photographs (3) Designed to improve map and photo interpretation skills. Emphasis on increased understanding of U.S.G.S. quadrangles, and special-purpose statistical maps. 509 Quantitative Methods (3) Fundamental statistics, methods, and techniques applied to geographic research and decision making, such as urban and regional planning.

521 Suburbanization and Land Development (3) Component systems and functional operations of urban/suburban communities, including ecological and demographic aspects. Emphasis on organization, development, change, and

problems of communities.

524 Population Processes (3) Characteristics and distribution of world populations are studied. The dynamic processes of population change (mortality, fertility, and migration) are examined. 525 Urban and Regional Planning (3) Application of community-planning theories and methods to designated urban and regional systems.

526 Metropolitan Systems and Problems (3) Urbanization processes and problems; urban systems in the expanding metropolitan and regional setting; present and proposed efforts to solve urban problems.

527 Planning Law and Organization (3) An insight into the role of federal, state, and local governments in instituting, executing, and judicially reviewing laws and regulations pertaining to land uses. Emphasis on the legal organization of the planning process, particularly at the local level. Major land-use court cases are presented and reviewed.

530 Demographic Analysis (3) A course to develop skills in basic demographic research, emphasizing the uses and limitations of data sources, and the understanding and interpretation of specific analytic methods for population analysis.

534 Geographic Information Systems (3) The common principles and concepts of Geographic Information Systems; examination of the theory and tools of spatial data analysis through specific applications.

540 Geography of the United States and Canada (3) A regional study of the United States and Canada, emphasizing its physical geography, settlement, agriculture, demography, and industrial activity.

544 Geography of Latin America (3) Regional geography of Latin America: its physical base, settlement, agriculture, demography, and manufacturing are considered.

545 Geography of Europe (excluding the U.S.S.R.) (3) Regional study of Europe. Influences of environmental factors, such as climate, landforms, and soils on the economic, social, and political condition of European nations.

546 Geography of the (Former) Soviet Union(3) Study of the physical, territorial, and

demographic attributes of the former U.S.S.R.; an analysis of the problems and prospects of the Commonwealth of Independent States.

♦ 572 Seminar in Resource Management (3) Applied research problem solving for resource management and environmental issues designed for an individual student or team-study basis. 585 Geography Field Methods (3) An advanced field course that includes urban and land-use studies. Use of field methods, mapping, and data collection for geographical reports.

590 Independent Studies in Geography (3) Research projects, reports, and readings in geography. PREREQ: Approval of discipline graduate

coordinator.

♦ 610 Thesis (3-6) A thesis is developed on a research problem for which the student formulates a theory, proposition or hypothesis, and investigates available information on the subject. 615 Internship (3-6) On-the-job experience in the application of theory, execution of substantive research, and provision of service with professional agencies at selected off-campus locations. In addition to the above GEO courses, the fol-

lowing ADM courses are offered, especially in connection with the Master of Science in Administration.

500 Methods and Materials of Research (3)

500 Methods and Materials of Research (3) Logic of scientific methodology, research design construction. Stress on hypothesis development and testing, data collection, measurement problems, theory application.

♦ 600 Research Report (3)

610 Thesis (3)

612 tnternship (3-6) Intensive field placement in organizations under faculty guidance/supervision. Precontracted learning objectives.

♦ This course may be taken again for credit, up to a maximum of six credits.

Geology and Astronomy

470 Schmucker Science Center West Chester University West Chester, PA 19383 610-436-2727

Dr. Wiswall, Chairperson

Dr. Pritchard, Coordinator of Graduate Studies

PROFESSORS

Sandra F. Pritchard, Ph.D., University of Oregon George Reed, Ed.D., University of Pennsylvania John Stolar, Ed.D., Pennsylvania State University

ASSOCIATE PROFESSORS

Richard M. Busch, Ph.D., University of Pittsburgh John E. Ehleiter, D.Ed., Pennsylvania State University Hubert E. Harber, M.A.T., Brown University Allen H. Johnson, Ph.D., Case Western Reserve University Arthur R. Smith, Ed.D., University of Pennsylvania C. Gil Wiswall, Ph.D., University of Montana

ASSISTANT PROFESSORS

Melinda Darby Dyar, Ph.D., Massachusetts Institute of Technology Elizabeth LeeAnn Srogi, Ph.D., University of Pennsylvania

Programs of Study

The Department of Geology and Astronomy, in cooperation with the Department of Chemistry, offers a program leading to the Master of Arts degree in physical science. (See physical science program.)

For the benefit of in-service teachers and other employed persons, West Chester schedules most of its graduate classes during late afternoons and evenings. Most of the students are part time; that is, they take less than nine credits per semester. The department also offers certification in earth and space science and general science.

COURSE DESCRIPTIONS GEOLOGY AND ASTRONOMY

Symbol: ESS, except as noted

It is assumed that for all geology courses, ESS 101 is a prerequisite, and for all astronomy courses, ESS 111 is a prerequisite. In addition, any course may be taken with permission of the instructor.

- 502 Mineralogy (3) Properties, identification, occurrence, and crystallography of the more important minerals. Fundamentals of mineral composition and structure.
- 504 Historical Geology (3) Geologic history of the earth and the evidence for this history, including discussion of the formation of the earth, atmosphere, oceans, and the historical evolution of land, air, and sea and the life that inhabits these environments. Examination of fossils and geologic maps. PREREQ: BIO 110, CHE 104, and CRL 104.
- 505 Petrology (3) Origin, classification, and identification of rocks. Hand specimen examination. PREREQ: ESS 502.
- 506 Quaternary Geology (3) An investigation of the most recent geologic period, including the records of climate change, geomorphology, glacial history, stratigraphy, sea level changes, and faunal evolution, that have accompanied the continental glaciations of the last two million years. Includes spring break field trip.
- 507 Geology of the Solar System (3) The geology, origin, and properties of planets, comets, asteroids, moons, and meteorites; planetary exploration. PREREQ: One introductory course in astronomy and one in geology.
- 508 Field Geology (1-3) Practical experience in techniques and tools of the field geologist. PRE-REQ: An introductory geology course.
- 510 Intermediate Mineralogy (3) How the petrographic microscope, x-ray diffraction, and the electron microscope are used to identify minerals. PREREQ: ESS 502.
- 513 Principles of Geochemistry (3) Migration and distribution of the chemical elements within the earth; chemistry of the lithosphere, hydrosphere, and biosphere; chemical changes throughout earth history; the geochemical cycle.
- 520 Structural Geology (3) An introduction to structural analysis: a study of the deformational features of the earth's crust and the forces responsible for producing them. PREREQ: ESS 505, or permission of instructor.
- 521 Geometrics (3) Application of computational and statistical methods to geological problems. Geologic sampling, data comparisons in environmental, petrologic, paleontologic, and geochemical problems.
- 523 General Geologic Field Studies of South-eastern Pennsylvania (3) Occurrence, relationships, and geologic history of the rocks, minerals, and soils of this area, studied at representative locations.
- 525 Tectonics (3) Kinematics and consequences of plate motion, origin of orogenic belts, and identification and analysis of modern counterparts: accretionary wedge, magmatic core, and thrust systems. Lab work involves vector analysis of plate motion and palinspastic reconstructions of thrust systems. PREREQ: ESS 305 and 420.
- ESL 527 Electron Microscopy 1 (3) A onesemester lecture/laboratory course in theory operation and applications of electron beam technology in scientific research. Course scheduled on student-demand basis.
- ESI. 529 Electron Microscopy II (3) A one-semester lecture/laboratory course in advanced

- theories operation and applications of electron microscopy in scientific research. Emphasis on individual projects. PREREQ: ESL 527. Course scheduled on student-demand basis.
- 530 Principles of Oceanography (3) Geology of the ocean floor, water movements, chemical characteristics of sea water, and vertical and horizontal distribution of plants and animals. Brief history of oceanography.
- 531 Introduction to Paleontology (3) Identification, paleobiology, and importance of fossils; paleoecology; and evolution.
- 532 Advanced Oceanography (3) An advanced course in oceanography covering resources, oceanographic literature, animal-sediment relationships, field techniques, estuaries, salt marshes, sea level changes, and pollution. PREREQ: ESS 330 or 530.
- 535 Introduction to Remote Sensing (3) An introduction to the science and technology of remote sensing and the applications of remote sensing data to geology, oceanography, meteorology and the environment. Includes a discussion of the history and principles of remote sensing; fundamentals of electromagnetic radiation; theory and types of active and passive remote sensing systems; fundamentals of image interpretation; digital analysis of LANDSAT and AVHRR data; operation of environmental satellites; and future imaging systems.
- 536 Environmental Geology (3) The application of geological information to human problems encountered in the physical environment, such as flooding, earthquakes, volcanic activity, hydrology, and land use.
- 539 Hydrology (3) The factors that control the distribution, occurrence, and recoverability of groundwater; techniques for locating and estimating recoverable water; groundwater pollution and waste water disposal. PREREQ: CHE 104, CRL 104, and MAT 162.
- 542 Geophysics (3) Methods and techniques of physics applied to interpreting the internal structure and composition of the earth. PREREQ: MAT 162, PHY 180, or PHY 140.
- 543 Geomorphology I (3) Lectures will present the constructional and degradational processes that have shaped present landforms and are constantly modifying those landforms. Laboratories will focus on the interpretation of topo-graphic maps and the use of remote sensing materials.
- 544 Geomorphology II (3) A continuation of the study of earth surface processes. Laboratories will focus on the interpretation of topographic maps and the use of remote sensing materials. PREREQ: ESS 543.
- 545 Regional Geomorphology of North America (3) Lectures will direct the student through a systematic analysis of the surface configurations and landform regions of North America; the processes at work on these configurations in the past and at the present; and man's relationships to these features and processes. Laboratories will emphasize these features, processes, and relationships through the use of topographic maps and remote sensing materials. Field projects will be included. PREREQ: ESS 543 and 544.
- 546 Geology of Petroleum (3) The characteristics of geologic origin and occurrence, migration, and accumulation of petroleum. Includes a study of reservoir fluids, traps, and dynamics and an investigation of exploration methods.
- 550 Sedimentology and Stratigraphy (3) The nature and origin of stratified deposits; the temporal-spatial relationships among stratified

- deposits, and other geologic and biologic phenomena; and the reconstruction of paleoenvironments.
- 553 Nautical Astronomy (Celestial Navigation) (3) A study of the technical skills of celestial navigation, covering topics such as celestial coordinates, principles of time, and the navigational triangle, lines of position, and star identification. PREREQ: Any algebra and trigonometry course.
- 554 Archeoastronomy (3) A study of the ancient astronomical skills, including those of the Babylonians, Egyptians, Greeks, Chinese, Maya, Incas, Aztecs, and the North American Indians. PREREQ: Any descriptive astronomy course.
- 555 Intermediate Astronomy (3) An analytical and qualitative analysis of selected astronomical topics: orbits, stellar properties, telescopes, photometry, solar surface details, nebulae, galaxies, and stellar evolution. Two-hour lecture and two-hour lab, including independent observatory work. PREREQ: Any descriptive astronomy course and algebra/trigonometry.
- 562 History of Astronomy (3) The development of astronomical theories from Greek times to the 20th century. PREREQ: Any descriptive astronomy course.
- 570 Meteorology I (3) Composition and properties of the atmosphere and principles that influence weather conditions.
- 571 Meteorology II (3) Continuation of the study of the principles governing the earth's atmosphere and how these principles determine weather conditions.
- 575 Introduction to the Planetarium (3) Principles and use of the planetarium in teaching. Specific projects are assigned. PREREQ: Any general astronomy course.
- 580 Special Problems (1-3) Study of special topics and current developments in the earth and space sciences. PREREQ: Permission of instructor.
- 582 Astronomy in England (3) The development of astronomical theories and equipment in England from prehistoric times until 20th century. PREREQ: An introductory course in astronomy and permission of instructor. Offered only in summer.
- ♦ 591 Independent Study (1-3) An investigation by the student. PREREQ: Permission of department.
- 594 Geology of the NW National Parks (4) This course includes a field trip to the national parks in South Dakota, Wyoming, Montana, Idaho, northern Utah, and Colorado. The purpose of the course is to look at the geologic features of the national parks in these states and to develop an appreciation of the geology and geologic history of the region. PREREQ: Permission of instructor.
- ♦ 600 Thesis Research I (3) A theory is developed on a research problem for which the student produces a thesis. PREREQ: Permission of adviser.
- ♦ 601 Thesis Research II (3) A theory is developed on a research problem for which the student produces a thesis. PREREQ: Permission of adviser.
- ♦ 602 Directed Research 1 (3) A theory is developed on a research problem for which the student produces a graduate paper. PREREQ: Permission of adviser.
- ♦ This course may be taken again for credit.

♦ 603 Directed Research II (3) A theory is developed on a research problem for which the student produces a graduate paper. PREREQ: Permission of adviser.

650 Institute in Planetarium Education (1-3) A course that provides the novice and inexperienced planetarium teacher with fundamental concepts that can be taught in the planetarium; intensive study of effective planetarium teaching methods; supervised training and practice in the operation; use and maintenance of the planetarium. PREREQ: Permission of instructor. (Offered only in summer.)

SCIENCE EDUCATION Symbol: SCE

500 Modern Trends in Science Education (3) Introduction to current research in science education; a critical review of the literature.

501 Modern Trends in Teaching Earth and Space Science (3) Recent materials and techniques in secondary school earth and space science.

510 Workshop in Secondary School Curricula (3) Study of one of the commonly used science programs for secondary schools. The selected program is announced in advance.

595 Elementary School Science Instruction (3) A course to improve the science content backgrounds of elementary school teachers and administrators.

SCIENCE OFFERINGS DESIGNED FOR ELEMENTARY SCHOOL TEACHERS

PHY 571 Physics for the Elementary Teacher (3)

♦ This course may be taken again for credit.

Health

207 South Campus West Chester University West Chester, PA 19383 610-436-2931

Dr. Patterson, Coordinator of Graduate Studies

PROFESSORS

John D. Lemcke, Ed.D., Temple University Roger W. Mustalish, Ph.D., University of Minnesota Robert P. Nye, Ed.D., Temple University Maura J. Sheehan, Sc.D., University of Pittsburgh Franklin Young, Ph.D., University of Florida

ASSOCIATE PROFESSORS

Bethann Cinelli, D.Ed., Pennsylvania State University Jeffrey E. Harris, D.H.Sc., Loma Linda University Gopal Sankaran, M.D., Dr.P.H., University of California at Berkeley

ASSISTANT PROFESSORS

Rebecca Brey, Ph.D., University of Florida Lynn Carson, Ph.D., Temple University Tammy James, Ph.D., Kent State University Sheila Patterson, Ph.D., Southern Illinois University Charles V. Shorten, Ph.D., Clemson University

ADJUNCT INSTRUCTOR

John P. Maher, M.D., State University of New York

Programs of Study

The Department of Health offers degree programs leading to the Master of Education in health, Master of Science in health, and a concentration in health services administration within the Master of Science in Administration.

The Master of Education enriches academic preparation for teaching in elementary and secondary schools. A concentration in school health is offered.

The Master of Science is designed primarily to meet the individual needs of the graduate student who wishes to pursue graduate work as an aid to upgrading a career in government, health care, industry, research, or a related health profession. Concentrations in environmental health, public health, and school health are offered. The M.S. is recommended for persons planning doctoral study.

The health services administration concentration in the Master of Science in Administration program meets the needs of those persons interested in entering the field of health administration, and of those persons presently in health administration interested in upgrading their careers.

Communication With the Department

All inquiries and other communications regarding the graduate program in health should be addressed: Graduate Coordinator, Department of Health, School of Health Sciences, West Chester University, West Chester, PA 19383. Students also may call for information at 610-436-2931.

MASTER OF SCIENCE PROGRAM

Admission Requirements

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree attained in their anticipated major area of health or equivalent preparation in a related field. They also must present the results of the aptitude section of the Graduate Record Examination and two letters of recommendation. Students who do not have adequate academic and professional preparation in the desired program of study will be required to take foundation courses.

Requirements for Admission to Degree Candidacy

Within the 15 semester hours of precandidacy, majors in health must complete departmental and concentration core courses with a minimum grade point average for these and all other courses during precandidacy of 3.0.

Requirements for the M.S.

- 1. Satisfactory completion of the M.S. curriculum shown below with a minimum overall grade point average (GPA) of 3.0.
- Satisfactory performance on the written and/or oral comprehensive examinations.
- 3. Oral defense of the thesis.

Registration Policy for Thesis Credits

Thesis credits for the M.S. are earned in ENV 615 and HEA 615. Satisfactory completion of the departmental comprehensive examinations is required before registration for ENV/HEA 615 is permitted. The student can enroll in ENV/HEA 615 only once.

CURRICULUM

(30-36 semester hours)

B. PUBLIC HEALTH

1. Degree Core 6 semester hours HEA 520 Scientific Basis for Health I (3) HEA 526 Scientific Basis for Health II (3)

2. Concentration Core 9 semester hours Students must select one of the concentrations below:

A. SCHOOL HEALTH
HEA 620 School Health Programs (3)
HEA 622 Curriculum and Instruction for Health Education
(3)
HEA 632 Advanced Theories of Health Behavior (3)

HEA 500 Diseases (3)
HEA 531 The Community as a Basis for Health (3)
HEA 632 Advanced Theories of Health Behavior (3)
C. ENVIRONMENTAL HEALTH

ENVIRONMENTAL HEALTH
ENV 530 General Environmental Health (3)
ENV 540 Seminar in Environmental Health (3)
ENV 551 Environmental Toxicology (3)

3. Concentration Electives 18 semester hours Selected under advisement

4. Additional Degree Requirements 3 semester hours ENV/HEA 615 Thesis

MASTER OF EDUCATION IN SCHOOL HEALTH

Admission Requirements

In addition to meeting the basic requirements of the University, given under Admission, applicants must present a baccalaureate degree attained in the field of health, or equivalent preparation in a related field and two letters of recommendation.

Requirements for Admission to Degree Candidacy

Within the 15 semester hours of precandidacy, the student must complete departmental and concentration core courses with a minimum grade point average (GPA) of 3.0. Students who do not have adequate professional and/or academic preparation for the desired program of study will be required to take foundation courses.

Requirements for the M.Ed.

- 1. Satisfactory completion of the M.Ed. curriculum shown below, with a minimum overall GPA of 3.0 in the concentration.
- Satisfactory performance on the written and/or oral comprehensive examination.
- 3. Successful completion of the research project.

Registration Policy for Research Credits

Research credits for the M.Ed. are earned in HEA 601. These credits must be preceded by successful completion of the degree core, concentration core, and concentration electives taken under advisement. Satisfactory completion of the departmental comprehensive examinations is required before registration for HEA 601 is permitted. The student can enroll in HEA 601 only once.

CURRICULUM

(39 semester hours)

1. Degree Core
HEA 520 Scientific Basis for Health I (3)
HEA 526 Scientific Basis for Health II (3)

2. Concentration Core 9 semester hours SCHOOL HEALTH

HEA 620 School Health Programs (3)

HEA 622 Curriculum and Instruction for Health Education (3) HEA 632 Advanced Theories of Health Behavior (3)

3. Concentration Electives
Selected under advisement
School Health Electives (12)
Education/Counseling Electives (9)

4. Additional Degree Requirements 3 semester hours HEA 601 Research/Report Writing in Health Education (3)

CONCENTRATION IN HEALTH SERVICES ADMINISTRATION—MASTER OF SCIENCE IN ADMINISTRATION

Admission Requirements

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree attained in their anticipated major area of health or equivalent preparation in a related field. They must also present the results of the aptitude section of the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT), submit a one-page statement of career objectives, arrange for two letters of recommendation, and have an interview with the degree admissions committee. The department's faculty contact for the MSA program is Dr. Sankaran, 610-436-2300. Students who do not have adequate academic and/or professional preparation for the desired program of study will be required to take foundation courses.

Requirements for Admission to Degree Candidacy

Within the 15 semester hours of precandidacy, majors in the health services administration concentration must complete three of the administration core courses and two of the health services administration core with a minimum GPA of 3.0.

Requirements for the M.S. in Administration

- 1. Satisfactory completion of the M.S. curriculum shown below with a minimum overall GPA of 3.0.
- 2. Satisfactory performance on the written and/or oral comprehensive examinations in HEA 520, 526, 630, and 631.
- 3. Complete each of the six administrative core courses with a grade of at least "B,"

CURRICULUM

(36 semester hours)

Administration Core
 ADM 501 Administration Theory and Environment (3)
 ADM 502 Computers for Managers (3)

ADM 503 Accounting for Administration (3)

ADM 505 Organizing Human Poscuraes (3)

ADM 505 Organizing Human Resources (3) ADM 506 Budgeting and Fiscal Management (3) or

ADM 507 Liability for Managers (3)

2. Health Department Core 6 semester hours
HEA 520 Scientific Basis for Health I (3)
HEA 526 Scientific Basis for Health II (3)

3. Health Concentration Core 6 semester hours
A. HEALTH SERVICES ADMINISTRATION

A. HEALTH SERVICES ADMINISTRATION HEA 630 Health Care Administration (3) HEA 631 Health Services Law (3)

4. Concentration Electives 6 semester hours Selected under advisement for Health Services Administration

COURSE DESCRIPTIONS HEALTH

Symbol: ENV

524 Industrial Hygiene (3) A study of the recognition, evaluation, and control of health hazards in the work environment. PREREQ: ENV 530, permission of instructor.

530 General Environmental Health (3) Methods of promoting health by controlling environmental factors relating to air, water, wastes, housing, radiation, and industrial hygiene.

532 Hospital Environment (3) A comprehensive assessment of the environmental health aspects of hospitals, including microbiologic considerations, environmental hygiene, safety, general sanitation, and administration.

533 Water Quality and Health (3) An examination of the physical, chemical, and biological characteristics of natural waters and their significance for human health; methods of water treatment and distribution also will be considered.

534 Watershed Dynamics (3) A detailed examination of watersheds, with emphasis on spatial and temporal variability of water pollution parameters. Methods of assessing pollution of water resources will be presented.

536 Hazardous Waste Management (3) An assessment of the sources, characteristics, and human health effects of hazardous wastes, with emphasis on the design and implementation of control practices. PREREQ: ENV 530.

537 Water Pollution Control (3) The principles and practice of pollution control of municipal and industrial wastewaters. Emphasis on wastewater characterization, monitoring, and treatment facility operations.

538 Ground Water Contamination (3) Provides a qualitative and quantitative examination of the fate, transport, and remediation of contaminants in ground water.

540 Seminar in Environmental Health (3) Directed reading, discussions, and oral presentation on contemporary issues in environmental health. PREREQ: ENV 530.

545 Risk Assessment (3) Provides a qualitative and quantitative examination of hazard, toxicity, and exposure assessment to establish human health and ecological risk from environmental contamination.

546 Environmental Assessment (3) An examination of methodologies necessary to conduct comprehensive environmental assessments. Monitoring strategies, field sampling techniques, and data quality assurance will be presented. Particular emphasis will be given to the applications of geographic information systems (GIS) to environmental assessments.

547 Environmental Regulations (3) Provides a fundamental overview of major environmental law principles. Focuses on a wide range of air, waste, water, transportation, and occupational regulations.

551 Environmental Toxicology (3) A multifaceted investigation of the health problems caused by various toxins and hazards found in the general environment and the workplace. The human body's reactions to environmental toxins; how suspected environmental toxins are experimentally investigated and the specific health effects of critical environmental toxins will be emphasized. PREREQ: ENV 530, permission of the instructor.

553 Occupational Safety (3) A study of the practices to reduce safety risks in the work environment through recognition, evaluation, and control of safety hazards. PREREQ: ENV 530, permission of

581 Special Topics (1-3) An in-depth study of selected, current topics relevant to the development of environmental health professionals. Specific topics will be noted in the master schedule. PREREQ: ENV 530, permission of instructor.

615 Thesis (3) A course for the Master of Science candidate. Students will select a topic, review the literature, prepare and conduct a research proposal, and write the thesis document. The student will defend the proposal and thesis document before a thesis committee.

Symbol: HEA

500 Diseases (3) Provides a contemporary view of disease and prevention, and a more precise understanding of disease processes. Body systems are reviewed, and the etiology, pathophysiology, symptoms, diagnostic techniques, and treatment methods used in selected diseases are studied. Illnesses most frequently found in our society are explored.

503 Human Nutrition (3) Selected topics in

human nutrition (3) Selected topics in human nutrition will be extensively examined, such as fiber and health, vitamins and minerals in health and disease, methods of weight control, anorexia nervosa, and bulimia. Emphasis is placed on methods of evaluating nutrition-related literature and claims, and interpretation of data and scientific studies relevant to nutrition.

506 Current Issues in Death and Dying (3) The course is intended to provide accurate information on a variety of topics related to death. Students will examine theories and concepts related to controversial issues of death and dying.

510 Adolescent Medicine Issues (3) This course is designed for the health professional working with adolescents. Topics will include eating disorders, sports medicine issues, risk behaviors, and other common concerns among adolescents.

511 Stress Management Techniques and Program Development (3) The first half of the course is devoted to examining basic stress concepts, the psychophysiology of stress, common stressors and their effect, and the relationship between stress and disease. The second half consists of a comprehensive review of stress management techniques that deal with cognitive restructuring, relaxation, and relationship building. Considerable emphasis is placed on personal application and group interaction in the classes.

512 AIDS and Public Health (3) Epidemiology of HIV/AIDS; natural history of HIV infection, psychosocial, economic, educational, ethical, legal, and health care issues related to HIV/AIDS will be addressed. Impact on social groups (minorities, women, and adolescents) will be discussed. Heath promotion and disease prevention strategies will be highlighted.

515 Professional Ethics and the Health Professions (3) This course focuses on professional ethical issues relevant to health in various settings. Students will examine ethical principles and theories underlying ethical dilemmas. Major areas of emphasis include ethical decision making, principles and theories, codes of ethics, protection of human subjects, and ethical concerns in graduate education.
520 Scientific Basis for Health I (3) An overview of the epidemiological model of disease

522 Gerontology (3) Information on past and present trends concerning services to the elderly. Discussions on contemporary gerontological problems and factors affecting the treatment of the elderly. This broad-based, introductory course is for those interested in the aging population.

causation. Various epidemiological study designs

and their applications will be presented.

525 Elementary School Health Education (3) Trends in elementary school health: curricular approaches and emphasis, teaching strategies, motivational techniques, resources, materials, issues, problems, and evaluations. PREREQ: Background in elementary education.

526 Scientific Basis for Health II (3) An overview of scientific methods, research designs, sampling, and survey techniques pertinent to the study of health issues will be presented. Choice and use of epidemiological and statistical software to analyze health data sets will be emphasized.

527 Sexual Issues in Modern Society I (3) Meet with professionals in various settings to discuss current sexual concerns, potential problems, and how to incorporate and handle these within the school curriculum. Sexual topics to include harassment, abuse, ethics, and religion. Course assumes basic knowledge of human sexuality.

528 Sexual Issues in Modern Society II (3) Emphasis is on experiential learning through such activities as visiting sites and speaking with health professionals. Included will be the Birthing Center, Women's Clinic, Planned Parenthood, and the Rape Crisis Center. Course assumes basic knowledge of human sexuality.

531 The Community as a Basis for Health (3) An analysis of the community with its diverse population and its response to critical and current health problems. Emphasis will be placed on the need for balance between individual and community needs, rights, and responsibilities.

533 Evaluation of Health Programs (3) Emphasis will focus on the procedures essential to the evaluation of health programs in a variety of settings (community, medical, school, worksite). Major areas include: conducting needs assessments, quality assurance measures, data collection methods, and preparation of final reports. Includes both theoretical and practical experience.

oretical and practical experience.
581 Special Topics (3) In-depth study of selected health topics current to the interests and needs of professionals serving in various health and health-related areas. Topics for each workshop will be announced prior to the first day of each semester.

601 Research/Report Writing in Health Education (3) The M.Ed. candidate selects a school health issue or a critical topic for review of the literature and produces a scholarly manuscript for publication in a professional journal. PREREQ: Permission of instructor.

609 Independent Study and Special Projects (1-3) Research projects, seminar papers, reports of special conferences, and reading in health. PRERFO: Administrative approval.

PREREQ: Administrative approval.
611 Field Placement (3) A project for students in health concentrations. All core course work should be completed before beginning the project. Permission of graduate coordinator required.

Permission of graduate coordinator required.

615 Thesis (3) A course for the M.S. candidate.

Students will select a topic, review the literature, prepare a research proposal, and conduct and write the thesis. The student will defend the proposal and thesis document before a thesis committee. PREREQ: Successful completion of comprehensive exams.

620 School Health Programs (3) This course provides the theoretical underpinnings of the prolession, professional responsibilities, and programmatic and critical issues in comprehensive school health programs.

622 Curriculum and Instruction (3) This course will address the foundation, philosophy, and practice of comprehensive school health education. Major focus in on the development, implementation, and evaluation of K-12 comprehensive school health education.

623 Substance Use Prevention (3) Designed for future and present school and public health educators, this course includes content and program planning skills for community and school: tobacco, alcohol, and other drug prevention curriculum and programs.

630 Health Care Administration (3) Administrative and management techniques acquired in the administrative core are applied to the problems involved in health administration/management. Topics will include federal, state, and local health agencies; health care centers; organization principles; personnel factors; public relations; and fiscal management.

631 Health Services Law (3) An analysis of the basic legal concepts and major legal issues that are important to and directly affect the health services administrator. Topics include legal frameworks of health organizations and health practitioners, administrative policy, contracts, consent, patient's rights, legal death, insurance, liability, and research.

Advanced Theories of Health Behavior (3) An advanced course on current theories in health behavior and the application of these theories to management methods in the health care field. Topics include trends in health behavior, health concerns, analysis of the decision-making process, and factors affecting health behavior.

UNDERGRADUATE COURSES FOR GRADUATE CREDIT

The Department of Health has approved the following undergraduate courses for graduate

credit when scheduled with the approval of the student's adviser and department chairperson. No more than six credits of 400-level course work may be used to satisfy graduate degree requirements.

ENV 459 Industrial Health Engineering (3) Students will learn the various environmental

health control strategies and the theoretical bases for these strategies. Students also will improve their quantitative skills by solving problems concerning the control of environmental health and safety hazards. Cost effectiveness, as well as technical effectiveness, will be discussed.

ENV 460 Industrial Hygiene Techniques (3) Evaluation techniques for monitoring the industri-

al environment will be learned in a laboratory setting and in the field. These techniques will include monitoring of air quality, air flow, noise, heat stress, and radiation. Evaluation of personal protective equipment, pulmonary function testing, and audiometric testing also will be investigated. PREREQ: ENV 350, 452, or permission of instructor.

History

506 Main Hall West Chester University West Chester, PA 19383 610-436-2201

Mr. Doyle, Chairperson

Dr. Boes, Coordinator of Graduate Studies

PROFESSORS

H. James Burgwyn, Ph.D., University of Pittsburgh Anne O. Dzamba, Ph.D., University of Delaware Claude R. Foster, Ph.D., University of Pennsylvania Thomas J. Heston, Ph.D., Case Western Reserve University Patricia C. Johnson, Ph.D., University of Rochester Donn C. Riley, Ph.D., St. Louis University Irene G. Shur, Ed.D., University of Pennsylvania Norbert C. Soldon, Ph.D., University of Delaware Jane B. Swan, Ph.D., University of Pennsylvania John J. Turner, Jr., Ph.D., Columbia University Richard J. Webster, Ph.D., University of Pennsylvania Robert J. Young, Ph.D., University of Pennsylvania

ASSOCIATE PROFESSORS

Lawrence R. Davidson, Ph.D., University of AlbertaRaymond A. Doyle, M.S., West Chester UniversityW. Bennett Peters, Ph.D., University of California, Santa Barbara

ASSISTANT PROFESSORS

Maria Boes, Ph.D., City University of New York Charles Hardy, Ill, Ph.D., Temple University William Hewitt, Ph.D., University of Wyoming James Jones, M.A., University of Delaware Jon Zimmerman, Ph.D., Johns Hopkins University

Programs of Study

The Department of History offers two degrees: the Master of Arts in history and, in cooperation with the School of Education, the Master of Education in social science with a concentration in history.

The Master of Arts degree in history provides a sound foundation for more effective teaching on the secondary level, for study leading to the doctorate, and for persons employed in industry and government. Study for the degree also enriches students' general cultural background and helps them to evaluate current events in light of the past.

The M.A. in history may be earned by completing either a thesis or nonthesis program. The candidate in the thesis program must pass a reading-proficiency test in an appropriate foreign language. The candidate, with the department chair-person's or graduate coordinator's permission, may substitute a demonstrated competency in statistics or a similar field. Students in the Master of Arts program in history (thesis or nonthesis option) are advised by the Department of History. The Master of Education in history is designed to provide in-

service teachers with additional professional education courses and an opportunity to enlarge their understanding of the historical past. It also is designed for the holders of the bachelor's degree who wish to earn state teacher certification while working toward a master's. Students in this program are advised by the Department of History.

In both programs, admission to full-degree candidacy requires

a grade point average (GPA) of 3.0.

Applicants who do not meet the above criteria may be admitted on a provisional basis. Students so admitted should apply for full-degree candidacy upon completion of 12 to 18 hours of applicable course work with at least a 3.0 GPA. In both programs, candidates must pass written comprehensive examinations at or near the conclusion of their course work. The comprehensives are administered once each semester. Those candidates wishing to take the comprehensives in a given semester should contact the graduate coordinator during the first three weeks of the semester.

MASTER OF ARTS IN HISTORY

(30 semester hours)

Thesis Option

American History (6)

European History (6)

Non-Western World History (6)

Seminar (in American, European, or Non-Western) (3) HIS 500 Methods and Materials of Research in History (3)

(May be waived with permission of chairperson or graduate coordinator)

HIS 691 Thesis (3-6)

History Elective (1-3)

Nonthesis Option

American History (6)

European History (6)

Non-Western World History (6)

Seminar (in American, European, or Non-Western) (3)

HIS 500 Methods and Materials of Research in History (3)

(May be waived with permission of chairperson or graduate coordinator)

History Electives (6-9)

MASTER OF EDUCATION IN SOCIAL SCIENCE

Concentration: History

(36 semester hours)

1. Professional education requirements

(See pages 47-48.) 12 semester hours

2. History courses (under advisement) 15-18 semester hours

3. HIS 500 Methods and Materials of Research in History

3 semester hours 3 semester hours

4. HIS 650, 651, or 6525. Electives (professional education or

1-3 semester hours

The Department of History has approved the following undergraduate courses for graduate credit when scheduled with the approval of the student's adviser and/or the department's chairperson: HIS 406, 411, 412, 415, 420, 421, 422, 423, 425, 426, 427, 435, 447, 451, 455, 462, and 474. No more than six credits of 400-level course work may be used to satisfy graduate degree requirements.

COURSE DESCRIPTIONS HISTORY

See also Social Science (SSC) Symbol: HIS

- 500 Methods and Materials of Research in History (3) Basic techniques and procedures in research; major types of research and methods for locating, evaluating, and interpreting evidence. The student develops a tentative outline, bibliography, and summary of an investigative procedure. Required of all degree-program students.
- 501 Studies in the History and Culture of South Asia (3) The Indian subcontinent's dominant political, cultural, and economic institutions. Features which contribute to an understanding of modern India and Pakistan.
- 505 Studies in the History and Culture of East Asia (3) The traditional basis for modern Chinese, Japanese, and Korean societies. The interaction between European and Asian cultures and resulting changes in East Asia.
- 509 Contemporary History of the Middle East (3) Recent history of major Middle Eastern societies; Iran and the oil situation; Israel and the Palestinian question; conflicting cultures.
- 511 Studies in the History and Culture of Emerging Africa (3) Emergence of modern African nationalism against the background of traditional African society and the legacy of European colonialism.
- 512 Independent Black Africa (3) The postwar experience of Sub-Saharan Africa, viewed in the light of the end of European colonial administration and the growth of an independent African society.
- 515 The Cultural and Intellectual History of Latin America (3) Pre-Columbian art and thought, scholasticism, mercantilism, the Great Debate, Baroque architecture, Enlightenment, conservatism, liberalism, Romanticism, Modernism, Positivism, Jose Enrique Rodo, Aprismo, Mexican muralists, novel of social protest, existentialism, and music. Lineaments of the Latin-American mind.
- 516 Modern Mexico (3) Mexico during the 19th and 20th centuries; stress on the dramatic transformation of Mexico from backwardness to modernity in the short period of a century and a half.
- 530 Problems in Medieval Civilization (3) Rise and fall of the Byzantine Empire, conquests of the Arabs and Turks, the crusades for the recovery of the Holy Land; the religious orders and the universal aspirations of the Papacy.
- 531 The Renaissance (3) Political, social, and cultural transitions in Italy and Northern Europe, 1350-1550.
- 532 The Reformation (3) Major and minor Protestant leaders and their movements; effects on the evolving nation-states; the Church of Rome's response; Wars of Religion and Treaty of Westphalia; the Scientific Revolution.
- 533 Dynastic Europe: 1648-1789 (3) The absolute dynastic monarchy as best exemplified by France, Prussia, and Russia; the middle class challenge as typified by the English experience; the Enlightenment and the New Science; capitalism; colonialism; and wars of empire.

- 535 Nationalism and Democracy: 1815-1914
 (3) Aftermath and effect of the French Revolutionary era; events brought on by the growth of nationalism and democracy; development of the industrial revolution. Roots of the First World War.
- 536 Europe Since 1914 (3) Twentieth-century Europe, with emphasis on causes of World War I: Europe between World War I and World War II; problems of contemporary Europe.
- 540 The Evolution of Modern Russia (3) A cultural approach to the historical development of Russia from the foundation of Kiev to the Revolution of 1917. Emphasis is on Russia's political and aesthetic uniqueness.
- 542 Women and Children in Early Modern Europe (3) Focuses on the private and public life of women and children of diverse social status in various European countries. Special attention is given to changing social, religious, economic, and cultural attitudes and how they affected the lives of women and children.
- 545 Holocaust (3) The study of steps leading to the Holocaust (1933-1945), the Holocaust itself, and the aftermath. The rise of Nazism is included.
- 550 Colonial America: 1607-1763 (3) Development of the 13 colonies of Anglo-America from their settlement to mid-18th century. Emphasis on a conceptual analysis of specific events and problems.
- 551 Revolutionary America: 1763-1789 (3) American development from the mid-18th century to the framing of the Constitution, with emphasis on the causes of the American Revolution and the evolution of American institutions and ideas throughout the period.
- 553 The Rise of the New Nation: 1789-1850 (3) A historiographical approach involving interpretations of the foundations and development of the Federalist Party, emergence of Jeffersonian Democracy, evolution of Jacksonian Democracy, and events of the Middle Period leading to the decade of controversy.
- 554 Civil War and Reconstruction: 1850-1877 (3) The War and its aftermath as the great watershed of United States national history. Emphasis on the conflicting interpretations of the causes, nature, and effects of the Civil War.
- 555 Emergence of Modern America: 1876-1923 (3) Rise of industry, labor, immigration, and new cultural patterns; emergence of new political alignments, rise of imperialism, development of liberalism and reform; America's struggle for neutrality and her participation in World War 1.
- 556 America Since 1919 (3) The impact of urbanization and industralization on society, politics, and economics; the problems of wars declared and undeclared and the various policies for peace.
- Development (3) Selected problems in the development of American constitutional government. The progressive adaptation of the law to a changing social and economic order. Conflicts such as nationalism versus states' rights, and vested rights versus police power.
- 558 Recent American Diplomatic History(3) American foreign policy in Europe, Asia, Latin

- America, and the Middle East from 1945 to the present. Objectives sought by the United States and the political, military, economic, and social policies pursued; origins of the Cold War.
- 559 American Urban History (3) Research methods and approaches for studying the history of cities in America. Emphasis on quantitative analysis, including studies of urban population, social mobility, and voting patterns.
- 561 The Indian in America's Past (3) The dispossession of the American Indian: land seizures, wars and treaties, cultural contact; customs, mores, economic, and religious life of the Indian; assimilation and preservation of Indian culture.
- 563 Biography (3) Considers the role of the individual and the writing of biography as a problem in historical thinking and research.
- 601 Directed Readings in American History (3) A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.
- 602 Directed Readings in European History (3) A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.
- 603 Directed Readings in World and Regional History (3) A critical examination of significant works on selected topics in the field. PREREQ: Permission of graduate coordinator.
- 650 Seminar in American History (3) Selected problems in American history. Subject announced in advance of each semester. PREREQ: HIS 500.
- 651 Seminar in European History (3) Selected problems in European history. Subject announced in advance of each semester. PREREQ: HIS 500.
- 652 Seminar in History of the Non-Western World (3) Selected problems in non-Western world history. Subject announced in advance of each semester. PREREQ: HIS 500.
- 660 Field Studies in History (3-6) A fully supervised learning experience, usually a tour, designed to expose students to the culture, artifacts, and research facilities of a given country or area.
- 690 Independent Studies in History (1-3) Research projects, reports, and readings in history. PREREQ: Approval of department chairperson.
- 691 Thesis (3-6)

SOCIAL SCIENCE Symbol: SSC

- 502 Methods and Materials for Teaching Social Studies (3) Current practices and procedures; organization and planning; the use of classroom, library, and curriculum materials; testing, measurements, and evaluation; bibliographical sources for both teachers and students.
- 580 Ethnic Cultures Institute (3) An interdisciplinary offering, the institute considers the contributions of ethnic groups to the culture of the United States. Designed primarily for teachers, community action personnel, and students who wish to increase knowledge and skills for developing meaningful intergroup relationships and improving classroom instruction. Educators and community leaders take part.

Instructional Media

Room 302E Recitation Hall West Chester University West Chester, PA 19383 610-436-2233

Dr. Spiecker, Chairperson

Ms. Rumfield, Coordinator of Graduate Studies

PROFESSOR

Joseph M. Spiecker, Ed.D., Nova University

ASSISTANT PROFESSORS

Robert Momeyer, M.Ed., Lehigh University Russell E. Reis, M.Ed., West Chester University Michael Ruffini, M.S., West Chester University Nancy J. Rumfield, M.S., West Chester University

Programs of Study

Students may apply for degree candidacy and work toward an M.S. or M.Ed. in instructional media, or they may complete the Instructional Technology Specialist Certification Program.

Admission Requirements

All candidates must meet the general requirements for admission to a degree program at West Chester University, listed under Admission.

Admission to Degree Candidacy

Before completing 15 semester hours, students must meet the following requirements for degree candidacy:

- 1. A 3.0 grade point average (GPA) in EDM course work and a 3.0 in all graduate course work.
- Successful performance on the Miller Analogies Test or Graduate Record Exam.
- Satisfactory performance on a qualifying examination in instructional media after completion of 12 semester hours.

Degree Requirements

- 1. Successful completion of all course work.
- A 3.0 GPA in courses in educational media and a 3.0 in all graduate course work.
- 3. Satisfactory performance on the comprehensive examination.

MASTER OF SCIENCE

(35-39 semester hours)

This program is designed for the many fields outside education, where highly skilled personnel are needed in the growing areas of training and instructional media.

CURRICULUM

a) Required Courses 26-30 semester hours

EDM 502 Selection and Effective Utilization of Instructional Media (3)

EDM 503 Developing Mediated Individualized Program (3)

EDM 505 Theory of Movie Production (3)

EDM 523 Design and Production of Visual Materials (3)

EDM 525 Basic Photography (3) EDM 533 Basic TV Production (3)

EDM 560 Organization and Administration of Media Programs (3)

EDM 563 Field Study of Media Programs (3)

EDM 591 Seminar in Research in Communications (2-6)

b) Concentration Area 9 semester hours (Six credits in one of the following, totalling nine credits in area

of concentration)

Photography EDM 513 Production of Multimedia Programs (3)

EDM 525 Basic Photography (3)

EDM 526 Intermediate Photography (3) EDM 528 Advanced Still Photography (3)

Instructional Design

EDM 503 Developing Mediated Individualized Programs (3)

EDM 524 Advanced Production of Visuals Materials (3)

EDM 529 Production of 8-mm Movies (3)

EDM 552 Computer Applications in Education (3)

Television

EDM 531 Cinematography l1 (3)

EDM 533 Basic TV Production 1 (3)

EDM 534 Instructional Television Production II (3)

EDM 535 Instructional Television Production III (3)

Research in Communication

EDF 500 Methods and Materials of Research (3)

EDM 591 Seminar in Research in Communication (3-6)

EDM 595 Independent Studies in Instructional Media (I-3)

RES 520 Research Design (3)

RES 650 Research Report (3)

MASTER OF EDUCATION

(33 semester hours)

This degree is offered to candidates who possess an Instructional Level I or Instructional Level II certificate. It prepares them for positions as instructional media coordinators in elementary and secondary schools, and for instructional and administrative positions in colleges.

CURRICULUM

a) Required Courses (outside department) 6 semester hours EDF 500 Methods and Materials of Research in Education (3)

EDM 505 Theory of Movie Production (3)

EDF 510 Educational Foundations (3)

b) Required EDM Courses 15 semester hours EDM 502 Selection and Effective Utilization of Instructional Media (3)

EDM 503 Developing Mediated Individualized Programs (3)

EDM 523 Design and Production of Visual Materials (3)

EDM 560 Organization and Administration of Media Programs (3)

EDM 590 Internship in Instructional Media (2-6)

c) Electives 12 semester hours

(Chosen under advisement)

EDM 501 Orientation to Instructional Media (3-6)

EDM 505 Theory of Movie Production (3)

EDM 508 Instructional Materials in the Elementary School Curriculum (3)

EDM 513 Production of Multimedia Programs (3)

EDM 524 Advanced Production of Visual Materials (3)

EDM 525 Basic Photography (3)

EDM 526 Intermediate Photography (3)

EDM 528 Advanced Still Photography (3)

EDM 531 Cinematography Il (3)

EDM 533 Basic Television Production 1 (3)

EDM 534 Instructional Television Production II (3)

EDM 535 Instructional Television Production III (3)

EDM 563 Field Study in Media Programs (3)

EDM 565 Seminar in Mass Media (2)

EDM 591 Seminar in Research in Communications (2-6)

CERTIFICATION PROGRAM

Instructional Technology Specialist

Courses required for certification in the Instructional Technology Specialist Certification Program include EDM 502, 503, 523, 560, and 590. Courses also may be required in photography, film, or TV, depending on the student's entry level into the certification program. To receive the certificate, students must successfully complete 24 credits and a proficiency exam.

COURSE DESCRIPTIONS INSTRUCTIONAL MEDIA Symbol: EDM

501 Orientation to Instructional Media (3-6) Survey of modern instructional media with opportunities for laboratory activities.

502 Selection and Effective Utilization of Instructional Media (3) Evaluates diverse types of instructional media and explores means of integrating and using media in instructional and training programs.

503 Developing Mediated, Individualized Programs (3) A workshop stressing the development of individualized, mediated instructional packages using the systems approach. PREREQ: EDM 501 or 502.

505 Theory of Movie Production (3) History and development of the motion picture; production techniques, the impact of 35-mm and 16-mm film, and the comparison of film production to television production.

508 Instructional Materials in the Elementary School Curriculum (3) Practice in techniques of using and evaluating communications media in the classroom.

513 Production of Multimedia Programs (3) Lectures, discussions, demonstrations, and lab sessions. Each student will prepare a multimedia presentation. PREREQ: EDM 525.

523 Design and Production of Visual Materials (3) Students explore the areas of design as they relate

to the production of visual instructional materials. 524 Advanced Production of Visual Materials (3) Advanced design and production of visual materials through various techniques, including computer technology. PREREQ: EDM 523. 525 Basic Photography (3) A basic laboratory

course in taking and processing still pictures and

526 Intermediate Photography (3) A workshop course for those who have had a basic photography course or previous photographic experience. PREREQ: EDM 525

528 Advanced Still Photography (3) Lecture and laboratory experiences in large format, and electronic visual production. PREREQ: EDM 525. 531 Cinematography II (3) Film and video post production techniques are explored. Importance of research as well as management and administration factors of film/video post production will be studied. PREREQ: EDM 533 or 505. 533 Basic TV Production 1 (3) Theory/preproduction techniques will be covered. PREREQ: EDM 505.

534 Instructional Television Production II (3) Planning, writing, producing, and evaluating television productions. PREREQ: EDM 533 535 Instructional Television Production III (3) Advanced TV/video productions will be required.

PREREQ: EDM 534.

552 Computer Applications in Education (3) Development of specialized instructional and management applications of hardware and software, including the use of desktop publishing.

560 Organization and Administration of Media Programs (3) The study of the philosophy, principles, and policies that are needed to manage/administrate an effective media services program. PREREQ: 12 graduate credits in instructional media.

563 Field Study of Media Programs (3) A scheduled group or individualized tour, foreign or domestic, in which students investigate notable installations or projects in instructional

565 Seminar in Mass Media (2) Explores current problems in the use of instructional media. PREREQ: 12 graduate credits in instructional

590 Internship in Instructional Media (2-6) Practicum in supervising and implementing instructional services. PREREQ: 18 credits in instructional media.

591 Seminar in Research in Communications (2-6) Basic elements of communication theory, applied to instructional media. Research in instructional media is analyzed.

595 Independent Studies in Instructional Media (1-3)

598 Workshop in Instructional Media (3-6)

Kinesiology (formerly Physical Education)*

Health and Physical Education Center West Chester University West Chester, PA 19383 610-436-2260

Dr. Lank, Chairperson Dr. Smith, Coordinator of Graduate Studies

PROFESSORS

Monita M. Lank, Ph.D., University of Iowa Richard B. Yoder, M.A., Villanova University

ASSOCIATE PROFESSORS

Frances Cleland, P.E.D., Indiana University Karen M. Koehler, Ed.D., University of North Carolina—Greensboro

Monica P. Lepore, Ed.D., New York University Susan W. Lubking, Ed.D., Temple University Paul K. Smith, Ph.D., Southern Illinois University John Williams, Ph.D., University of London

ASSISTANT PROFESSORS

Frank F. Fry, D.P.E., Springfield College John Helion, Ed.D., Columbia University W. Craig Stevens, Ph.D., Temple University M. Kent Todd, Ph.D., University of North Carolina-Greensboro Karin Volkwein, Ph.D., University of Tennessee

*Change is effective July 1, 1995.

ADJUNCT

C. Daniel Moser, Ph.D., Temple University Tony J. Verde, Ph.D., University of Toronto

Program of Study

The Department of Kinesiology offers programs leading to a Master of Science degree in physical education with concentrations in general physical education, and exercise and sport physiology. A Master of Science in Administration degree with a concentration in sport and athletic administration also is offered. The Master of Science degree in physical education, general physical education concentration (research project track), enriches academic preparation for teaching in the public schools or for obtaining employment in the various professions related to physical education. The Master of Science degree in physical education, exercise and sport physiology concentration (research report track), enriches academic preparation for working in adult fitness, cardiac rehabilitation, and other clinical programs. Both Master of Science degrees in physical education (thesis track) are designed primarily to meet the individual needs of graduate students who want to pursue graduate work beyond the master's degree or a career in research. It also may prepare personnel for staff positions in education, government,

The sport and athletic administration concentration in the Master of Science in Administration program is designed to provide academic preparation for those persons interested in entering the field of sport and athletic administration, and to assist in upgrading the credentials of those persons presently in the fields of sport and athletic administration.

Certification in driver education and safe living also is offered by the Department of Kinesiology, as a summer program.

The Professor Russell Sturzebecker Scholarship

The Graduate Division in the School of Health Sciences in the Department of Kinesiology administers the Professor Russell Sturzebecker Scholarship. Through the generosity of Mr. John F. Unruh, a \$100 award is made each semester to a "worthy and needy" graduate student in health and physical education. The award is donated by Mr. Unruh in honor of Professor Sturzebecker.

The recipient must be working full time in the field of health and physical education and must be a part-time student at West Chester University working towards a master's degree in his or her professional field.

Graduate students who meet the above criteria are invited to submit a letter of application for the scholarship along with a resume of their professional and academic status. These documents should be submitted to the chairperson of the Department of Kinesiology on or before December 15 for the first semester award and on or before March 15 for the second semester.

The Graduate Scholarship

The Graduate Division of the Department of Kinesiology administers a graduate scholarship. The amount of money awarded may vary somewhat from year to year depending on the funds available, but it is anticipated that the award will be approximately \$300 each year.

Selection criteria include scholarship, citizenship and character, leadership, need, and ability in, and/or contribution to, specific areas of health or physical education.

Application forms are available from the Department of Kinesiology, Room 106, South Campus.

Communication With the Department

All inquiries and other communications regarding the graduate program in physical education should be addressed to the coordinator of graduate studies and sent to the department address above.

Comprehensive Examination

The comprehensive examination for graduate students in physical education is administered twice a year, in March and October. Each examination consists of an elective course portion, given for two hours on a Tuesday, and the required course portion, given for two hours on the following Thursday.

Students who want to take the examination must have been admitted to degree candidacy and should have completed all required course work or be currently enrolled and have completed the majority of their elective requirements. A letter of intent to take the comprehensive examination should be filed with the coordinator of graduate studies. Letters of intent should be filed by February 15 for the March examination or September 15 for the October examination, respectively.

Upon receipt of the letter of intent and with the approval of the coordinator, students will be sent a letter explaining the details, time, and place of the examination.

MASTER OF SCIENCE PROGRAM Concentration in General Physical Education

Admission Requirements

Applicants must meet the basic requirements of the University, given under Admission, and must present either a baccalaureate degree earned in their anticipated major area of health or health and physical education, or equivalent preparation in a related field.

Thesis Track

- 1. Bachelor's degree: physical education or related field
- 2. GPA: 2.75 or higher on a 4.0 scale
- 3. GRE: 1000 (combined verbal and math) or higher recommended
- 4. Undergraduate prerequisites:

- A. Human Anatomy
- B. Human Physiology
- C. Kinesiology
- D. Exercise Physiology
- 5. Approval of application by the Department Graduate Committee

Research Report Track

- 1. Bachelor's degree: physical education or related field
- 2. GPA: 2.50 or higher on a 4.00 scale
- 3. GRE: 900 (combined verbal and math) or higher recommended
- 4. Undergraduate prerequisites:
 - A. Human Anatomy
 - B. Human Physiology
 - C. Kinesiology
 - D. Exercise Physiology
- 5. Approval of application by the Department Graduate Committee

Admission to M.S. Degree Candidacy

During the 12 to 15 hours of precandidacy, students must complete any three of the departmental core courses with a minimum GPA for these and all other courses of 3.0.

Students must apply for candidacy within one semester after completing 12-15 hours of precandidacy.

Requirements for the M.S. Degree

- 1. Satisfactory completion of the M.S. curriculum with a minimum GPA of 3.0
- Satisfactory performance on written and/or oral comprehensive examination
- 3. Successful completion of the thesis or research project
- 4. Oral defense of the thesis (for thesis track only)

Curriculum

(33-34 semester hours)

Degree Core

21 semester hours

KIN 572 Advanced Motor Learning (3)

KIN 580 Sociological and Psychological Aspects of Sport and Physical Education (3)

KIN 585 Biomechanics (3)

KIN 600 Research Methods in Health, Physical Education, and Recreation (3)

KIN 601 Statistical Design for Research and Evaluation in Physical Education (3)

KIN 602 Advanced Philosophy of Sport and Physical Education (3)

KlN 681 Advanced Exercise Physiology (3)

2. Additional Degree Requirements -

Thesis Track

12 semester hours

13 semester hours

KIN 608 Thesis Seminar (3)

KIN 610 Thesis (3)

Electives selected under advisement (6)

Additional Degree Requirements -

Research Report Track

KlN 606 Research Report Seminar 1 (2)

KIN 607 Research Report Seminar II (2)

Electives selected under advisement (9)

The thesis proposal must be formally approved during Thesis Seminar (KIN 608) before the student may register for Thesis (KIN 610).

MASTER OF SCIENCE PROGRAM

Concentration in Exercise and Sport Physiology

Admission Requirements

Applicants must meet the basic requirements of the University, given under Admission, in addition to the following requirements.

Thesis Track

- 1. Bachelor's degree: physical education or related field
- 2. GPA: 2.75 or higher on a 4.0 scale
- 3. GRE: 1000 (combined verbal and math) or higher recommended.

- 4. Undergraduate prerequisites:
 - A. Human Anatomy
 - B. Human Physiology
 - C. Kinesiology
 - D. Exercise Physiology
 - E. Fitness Assessment/Exercise Prescription or Electrocardiography and Stress Testing
- 5. Approval of application by the Department Graduate Committee

Research Report Track

- 1. Bachelor's degree: physical education or related field
- 2. GPA: 2.50 or higher on a 4.00 scale
- 3. GRE: 900 (combined verbal and math) or higher recommended
- 4. Undergraduate prerequisites:
 - A. Human Anatomy
 - B. Human Physiology
 - C. Kinesiology
 - D. Exercise Physiology
 - E. Fitness Assessment/Exercise Prescription or Electrocardiography and Stress Testing
- 5. Approval of application by the Department Graduate Committee

Requirements for Admission to Degree Candidacy

During the 12 to 15 hours of precandidacy, students must complete any three of the departmental core courses with a minimum GPA for these and all other courses of 3.0.

Students must apply for candidacy within one semester after completing 12-15 hours of precandidacy.

Requirements for the M.S. Degree

- 1. Satisfactory completion of the M.S. curriculum with a GPA of 3.0
- Satisfactory performance on written and/or oral comprehensive examination
- 3. Successful completion of the thesis or research project
- 4. Oral defense of the thesis (for thesis track only)

Curriculum

(33-40 semester hours)

Required courses

١.	Degree Core	16	-18 semester	hours
1.	Degree Core	10	To semester	

KIN 572 Advanced Motor Learning (3)

KIN 585 Biomechanics (3)

KIN 600 Research Methods in Health, Physical Education, and Recreation (3)

KIN 601 Statistical Design for Research and Evaluation in Physical Education (3)

KIN 606* Research Project Seminar I (2) PREREQ: KIN 600

KIN 607* Research Project Seminar II (2) PREREQ: KIN 600 and KIN 606

KIN 608** Thesis Seminar (3) PREREQ: KIN 600

KIN 610** Thesis (3) PREREQ: KIN 600 and KIN 608

*Research report track only

**Thesis track only

2. Concentration Core 9 semester hours

KIN 681 Advanced Exercise Physiology (3)

KIN 687* Applied Muscular Physiology (3) PREREQ: KIN 681

KIN 688* Applied Cardiovascular Physiology (3) PREREQ: KIN 681

*Open only to exercise physiology concentration majors.

3. Electives 6-9 semester hours An additional nine credit hours are required for the research report track.

An additional six credit hours are required for the thesis track.

4. Internship 6 semester hours Internship experience may be required of students in the Research Report Track who did not have comparable experience as an undergraduate and/or has no work experience in their chosen field of study.

KIN 611 Intern Study (3)

KIN 612 Intern Study (3)

MASTER OF SCIENCE IN ADMINISTRATION Concentration in Sport and Athletic Administration

Admission Requirements

Applicants must submit official undergraduate transcripts denoting: receipt of bachelor's degree and majors from all undergraduate institutions attended; scores from the Miller Analogies Test, Graduate Record Examination or Graduate Management Admissions Test; an essay with a clear focus on career plans; and two letters of reference from professional supervisors that address the applicant's administrative potential. All application materials are to be submitted to the Office of Graduate Studies and labeled: "Attention, M.S.A. Application of (student's name)." After the Office of Graduate Studies has received these materials, the M.S.A. director will schedule an admissions interview with the applicant.

Admission to M.S. Degree Candidacy

During the 15 semester hours of precandidacy, majors in the sport and athletic administration concentration must complete three of the administrative core courses, and two of the sport and athletic administration core courses with a minimum GPA for these courses of 3.0.

Requirements for the M.S. Degree

- 1. Satisfactory completion of the M.S. in administration curriculum shown below with a minimum overall GPA of 3.0.
- Satisfactory performance on the written and/or oral comprehensive examination.

Curriculum

(34-39 semester hours)

1. Administrative Core 18 semester hours

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting and Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3)

ADM 507 Liability for Managers (3)

2. Sport and Athletic Administration Core

A. Option #1 - Research Scholarship (16/19 credits)

KIN 513 Theories and Principles of Sport Management (3)

KIN 514 Problems and Issues in Sport Management (3)

KIN 600 Research Methods in Health, Physical Education, and Recreation (3)

KIN 601 Statistical Design for Research and Evaluation in Physical Education (3)

KIN 606 Research Project Seminar I (topics defined by student's career goals) (2)

KIN 607 Research Project Seminar II (2)

KIN 611 Intern Study I (under advisement) (3)

The research project consists of a two-semester sequence (KIN 606 and 607) which must be preceded by successful completion of KIN 606 (Research Methods in Health, Physical Education, and Recreation).

- B. Option #2 Applied Management Scholarship (21 credits)
 - (1) Must take all 18 credits

KIN 513 Theories and Principles of Sport Management (3)

KIN 514 Problems and Issues in Sport Management (3)

KIN 600 Research Methods in Health, Physical Education, and Recreation (3)

KIN 601 Statistical Design for Research and Evaluation in Physical Education (3)

KIN 611 Intern Study I (3)

KIN 612 Intern Study II (3)

(2) Must select three credits K1N 580 Sociological and Psychological Aspects of Sport

and Physical Education (3)
KIN 602 Advanced Philosophy of Sport and
Physical Education (3)

CERTIFICATION PROGRAM IN DRIVER EDUCATION AND SAFE LIVING

(Highway Safety and General Safety Education)

Richard B. Yoder, Coordinator

A teacher's certificate may be extended to include education for safe living (highway safety and general safety education) by completing 12 semester hours of course work in the Department of Kinesiology. Courses are scheduled during summer months only.

Contact the coordinator for further information.

Curriculum

(12 semester hours)

KIN 561 Seminar in Driver Education

KIN 660 History and Philosophy of Safety Education and Principles of Accident Prevention

KIN 661 Contemporary Practices and Program Evaluation in Safety Education

KIN 662 Problems in Traffic and Driver Education

COURSE DESCRIPTIONS KINESIOLOGY

Symbol: KIN unless otherwise indicated

- 500 Contemporary Problems in Physical Education, Recreation, and Athletics (3) Problems in teaching health, physical education, and recreation; in-service aspects; factors and variables that influence solutions of these problems.
- 513 Theories and Principles of Sport Management (3) This course is designed to provide an overview of the management responsibility of the sport administrator, including planning, organizing, staffing, directing, and controlling the sport enterprise. Emphasis will be placed on personnel, financial concerns, facility management, and public relations.
- 514 Problems and Issues in Sport Management (3) This course is designed to provide an overview of contemporary problems and issues in sport management, including an analysis of sport trends with a review of sport-governing agencies and organizations and their affect on athletic department programs
- 550 Elementary Physical Education Workshop (3) Orientation for the teaching of elementary physical education. Principles and practices; appropriate activities for various grade levels.
- 551 Elementary Physical Education Recreation Music Workshop (2) Leading and teaching rhythmic activities and singing in elementary physical education and recreation. Fundamental level. Instruction programmed music textbook; piano and guitar chords. Creating and teaching recreational and singing games.
- 552 Learning on the Move (3) Movement education and perceptual motor theory. Activities for helping children achieve their maximum development.
- 561 Seminar in the Four-Phase Program of Driver Education (3) In-service experience for driver education teachers in the classroom. Behind the wheel (BTW), multicar method, and simulation.
- 572 Advanced Motor Learning (3) An investigation of the theories, research, and practical applications of the processes and conditions involved in the teaching and learning of physical skills.
- 580 Sociological and Psychological Aspects of Sport and Physical Education (3) Social, psychological, and cultural factors influencing sport and physical education. Discussion of pertinent issues and research applications.
- 581 Adapted Physical Education (3) Techniques for a program of adapted physical education in the public school. Application of activities to benefit the child with a temporary or permanent disability.

- 585 Biomechanics (3) A review of, or introduction to, the basic principles of biomechanics and the application of those principles to research and teaching.
- 600 Research Methods in Health, Physical Education, and Recreation (3) Techniques of research applied to the field of health, physical education, and recreation.
- 601 Statistical Design for Research and Evaluation in Physical Education (3) The practical and theoretical application of the basic concepts of elementary statistics as they relate to evaluative procedures, research, and teaching in physical education.
- 602 Advanced Philosophy of Sport and Physical Education (3) Major philosophical theories of sport. Discussion of various conceptual, movement/aesthetic, and social-political issues.
- 603 Professional Literature Seminar (3) Provides students with the skills necessary to review and critically analyze the professional literature and current findings in physical education; useful for the student planning to conduct research.
- 604 Administration and Supervisory Practices for Health, Physical Education, Recreation, and Athletics (3) Nature of the positions of directors or supervisors of physical education, recreation, and athletics. Job specifications; operational principles and procedures.
- 605 Curriculum in Physical Education (3) Trends in health and physical education curricula at the elementary, secondary, and college levels. Surveys, reports, and analyses of curriculum practices.
- 606 Research Project Seminar 1 (2) A course for master's candidates who select the report option. Students select a problem for the research report, review literature, develop procedures, and collect data. They are expected to complete the first three chapters of their research reports during Seminar I. PREREQ: KIN 600.
- 607 Research Project Seminar II (2) Master's candidates register for this course after completing Seminar I. In this course, students complete chapters four and five of the research report. PREREQ: KIN 606.
- 608 Thesis Seminar (3) A course for the student who selects the thesis option. The candidate selects a topic, reviews the literature, develops procedures, and prepares a proposal acceptable to the thesis committee. They then register for KIN 610. PREREQ: KIN 600.
- 609 Independent Study and Special Projects (1-3) Students select independent study projects and develop proposals. These projects may be in support of students' research or related to their

- vocations. The proposals must be accepted and approved by the coordinator of graduate studies in the semester prior to registration for independent study
- 610 Thesis (3) Students must register for the thesis after completion of KIN 608. One additional enrollment in KIN 610 may be allowed with the approval of the graduate coordinator. PREREQ: KIN 608.
- 611-612 Intern Study (3) (3) For the M.S.A. student in athletic administration who needs or desires practical experience in administering athletic programs. (The student may elect 3-6 credits of internship experience.)
- 650 The Child and Physical Education (3) Contributions of physical education to a child's physical, social, emotional, and intellectual growth and to developmental needs and interests. The influences of various activities on growth and development.
- 660 History and Philosophy of Safety Education and Principles of Accident Prevention (3) The safety movement in the United States and other countries. The place of safety education in modern living, philosophies of safety-education leaders; accident causation and prevention (their research implications). Background for administering school, civil defense, and emergency safety programs.
- 661 Contemporary Practices and Program Evaluation in Safety Education (3) Current practices, evaluation of programs, and research of current literature in safety education. Techniques for selecting, constructing, and using instruments for evaluating safety-education programs. Problem-solving projects.
- 662 Problems in Traffic and Driver Education
 (3) Contemporary curriculum and current
 practices in driver and traffic education, enforcement of traffic laws and regulations, and
 engineering problems. Problem-solving projects.
- 680 Scientific Principles of Coaching (3) Recent trends in theories and techniques of teaching sports. Mechanical principles of efficient movement. Research related to competitive performance. Specialists serve as guest panelists.
- 681 Advanced Exercise Physiology (3) Clinical and laboratory use of exercise in evaluating, maintaining, and modifying human physiological processes: growth development, metabolism, and weight control; and cardiovascular and respiratory functions in health and disease; and neuromuscular integration and performance. Stress physiology, and training and conditioning.
- 685 Women's Exercise and Sports (3) The physiological, psychological, and sociological effects of exercise and sport on women.

686 Organization and Management of Adult Fitness Programs: Clinic/Seminar (3) An indepth analysis and practical experience in organizing and managing adult fitness programs.

687 Applied Muscular Physiology (3) This course is designed to provide an in-depth understanding of the structure and function of skeletal muscle and its responses and adaptations to exercise.

688 Applied Cardiovascular Physiology (3) This course is designed to provide an in-depth

understanding of the mechanisms underlying cardiovascular function and the effects of acute and chronic exercise on these mechanisms.

689 Clinical Exercise Physiology (3) This course is designed to provide students with an understanding of the role of the exercise professional in clinical settings. Emphasis is given to the interaction between exercise and the more prevalent diseases and conditions of altered health status (e.g., cardiovascular disease, respiratory disease, diabetes, obesity, osteopathic disease, pregnancy, back pain, and others).

690 Exercise and the Older Adult (3) A course designed to prepare professionals to assess fitness levels of persons over the age of 50 and scientifically design exercise and fitness programs to meet the specific needs of the older participant.

SERVICE COURSES

The following courses are open to students in all curricula, with no prerequisite in health or physical education required: KIN 550, 551, 552, 561, 580, 581, 585, 605, 650, 660, 661, 662, 680, and 682.

Leadership for Women

207 Ruby Jones Hall West Chester University West Chester, PA 19383 610-436-2746 or 610-436-2464

Dr. Rengert, Program Concentration Adviser

Dr. Milne, Director, Master of Science in Administration

Dr. Schlau, Director, Women's Studies

WOMEN'S STUDIES GROUP

PROFESSORS

Diane O. Casagrande, Ph.D. (Communication Studies)

Mary E. Crawford, Ph.D. (Psychology)

Anne Dzamba, Ph.D. (History)

Patricia C. Johnson, Ph.D. (History)

Mary Keetz, Ph.D. (Education)

Elizabeth Larsen, Ph.D. (English)

Lynette F. McGrath, Ph.D. (English)

Tabana Naman Ph D (Esanomiss)

Tahany Naggar, Ph.D. (Economics)

Carol Radich, Ph.D. (Education)

Arlene Rengert, Ph.D. (Geography)

Stacey Schlau, Ph.D. (Foreign Languages)

Jane Swan, Ph.D. (History)

C. James Trotman, Ed.D. (English)

Richard J. Webster, Ph.D. (History)

ASSOCIATE PROFESSORS

Emma Lee Brown, M.S.L.S. (Library) Deborah Mahlstedt, Ph.D. (Psychology)

Mary McCullough, Ph.D. (Communication Studies)

ASSISTANT PROFESSORS

Helen Berger, Ph.D. (Sociology)

Maria R. Boes, Ph.D. (History)

Mary Anne Burns-Duffy, M.S.L.S. (Library)

Celia Esplugas, Ph.D. (Foreign Languages)

Andrea Fishman, Ph.D. (English)

Robin Garrett, M.S.N. (Nursing)

Elizabeth A. Giangiulio, M.Ed. (Career Development)

Saundra Hall, M.A. (Theatre)

Jane Jeffrey, Ph.D. (English)

Margarete Landewehr, Ph.D. (Foreign Languages)

Patricia Patrick, M.A. (Education)

Ruth Porritt, Ph.D. (Philosophy)

Geetha Ramanathan, Ph.D. (English)

Frauke Schnell, Ph.D. (Political Science)

Carol Shloss, Ph.D. (English) Mary Stieber, Ph.D. (Art)

Karin Volkwein, Ph.D. (Physical Education)

Leadership for Women is a concentration within the Master of Science in Administration program. It addresses organizational power, which sometimes is inequitable for men and women of equal training and talent. It recognizes that women who seek to advance to leadership positions often become change agents within the organization, and sometimes within their families and community as well.

This concentration consists of four required and two elective courses. The required courses involve reading and study of feminist perspectives on initiating, responding to, and managing change. They examine theories and practices that clarify values. They contain models and strategies for resolving the conflicts and logistical dilemmas vital to a successful administrative career that differs from conventional sex role ascription of status and power.

Students in other M.S.A. concentrations also may take these required courses.

PSY 465/565 Psychology of Women (3)

WOS 530 Women in Leadership: Critical Issues (3)

WOS 531 Management of Leadership: Laboratory Course (3)

WOS 533 The Woman Executive: Research Seminar (3)

The student, with the approval of the adviser, chooses two electives appropriate to specific career interests. Examples include:

ADM 612 Internship (3-6)

ECO 503 Economic Role of Women (3)

ENG 508 Writing Seminar (3)

GEO 530 Demographic Analysis (3)

PSC 515 Women in Politics (3)

PSC 552 Civil Liberties and Civil Rights (3)

♦ WOS 539 Independent Study (3)

Comprehensive examination in concentration is required. Students in the degree program also take six required courses in the Administration Core:

ADM 501 Administrative Theory and Environment (3)

ADM 502 Computers for Managers (3)

ADM 503 Accounting/Budgeting (3)

ADM 504 Communication for Administrators (3)

ADM 505 Organizing Human Resources (3), and either

ADM 506 Budgetary Process (3), or

ADM 507 Liability for Managers (3)

[♦] This course may be taken again for credit.

COURSE DESCRIPTIONS WOMEN'S STUDIES

Symbol: WOS

530 Women in Leadership: Critical Issues (3) Survey of the literature that defines and discusses critical issues for the woman leader. Some issues center around lifestyle choices and conflicts (loneliness, family pressure) and others around organizational barriers and alternative means to overcome them.

531 Management of Leadership: Laboratory Course (3) The study and practice of alternative leadership modes. The course uses workshop techniques to teach speech, small-group dynamics, and other communication skills, and problemsolving strategies.

533 Woman Executive: Research Seminar (3) A seminar that requires each student to complete an original project on the goals, problems,

choices, or successes of women in middle- or upper-level management positions. The use of case studies, surveys, oral history, and other research techniques will be explored. An appropriate internship may be substituted for this course.

539 Independent Study (3) A project to be developed independently by the student working with a specific instructor.

Linguistics

550 Main Hall West Chester University West Chester, PA 19383 610-436-2898

(Interdisciplinary Area) Dr. Godfrey, Coordinator

LINGUISTICS GROUP

Diane O. Casagrande, Professor (Communication Studies) W. Stephen Croddy, Professor (Philosophy) Dennis L. Godfrey, Assistant Professor (English) John T. Kelly, Associate Professor (English) Cheri L. Micheau, Assistant Professor (English) Garrett Molholt, Associate Professor (English) Paul Stoller, Professor (Anthropology-Sociology)

Although West Chester presently offers no degree in linguistics, students interested in developing a concentration in this area may elect courses from the following list. For additional information, consult the coordinator.

COURSE DESCRIPTIONS LINGUISTICS

Symbol: LIN

501 Introduction to Linguistics (3) Basic concepts of language description, classification, change, reconstruction, dialectology, and sociolinguistics.
503 Phonology and Morphology (3) Phonetics, phonemics, morphophonemics, and the morphological composition of words.

504 Syntax (3) A comparative study of the various modern approaches to the study of grammar. PREREQ: ENG 575 or LIN 501.
505 Transformational Grammar (3) Basic con-

505 Transformational Grammar (3) Basic concepts of transformational theory and their application in teaching. PREREQ: ENG 575 or LIN 501.

506 Meaning in Language (also PHI 506) (3) See PHI 506.

512 Descriptive Linguistics (3) Analysis of the phonemic, morphological, and syntactic features of typologically divergent languages. Procedures for eliciting linguistically relevant data about a language from a native speaker. PREREQ: LtN 503.

515 Language, Thought, and Behavior (also COM 515) (3) See COM 515.

523 Philosophy of Language (also PHI 523)(3) See PHI 523.

540 Sociolinguistics (also SOC 540) (3) The study of language in its social context: the

ethnography of communication; language and society, social classes, ethnic groups, politics, sex, and education. PREREQ: LIN 501 or permission of instructor.

555 Psycholinguistics (3) A study of the relationships between language and thought. Models of language, communication theory, and learning theory. Emphasis on natural language development and bilingualism.

580 Language and Culture (also ANT 580) (3) Language as an aspect of culture; linguistic-perceptual-cognitive categories; social and psychological aspects of language. PREREQ: LtN 501 or permission of instructor.

590 Independent Study (1-3)

Management-See Business Marketing-See Business

Mathematics and Computer Science

13-15 University Avenue West Chester University West Chester, PA 19383 610-436-2440

Dr. Weaver, Chairperson Dr. Milito, Coordinator of Graduate Studies 610-436-2690

PROFESSORS

Richard G. Branton, Ph.D., University of Pennsylvania Richard Epstein, Ph.D., Temple University James D. Fabrey, Ph.D., Massachusetts Institute of Technology Frank Grosshans, Ph.D., University of Chicago Sebastian S. Koh, Ph.D., University of California James E. L'heureux, Ph.D., Louisiana State University Eli M. Mandelbaum, Ph.D., University of Pennsylvania Michael Montemuro, Ed.D., Temple University Waclaw Szymanski, D.Sc., Polish Academy of Sciences John W. Weaver, Ph.D., Johns Hopkins University

ASSOCIATE PROFESSORS

Gail M. Gallitano, Ed.D., Columbia University
Shiv K. Gupta, Ph.D., Case Western Reserve University
Jozsef Horvath, Ph.D., Yale University
John J. Kerrigan, D.Ed., Temple University
Robert Kline, Ph.D., Washington University
Elaine R. Milito, Ph.D., Pennsylvania State University
Ronnie L. Morgan, Ph.D., University of Missouri

Lin Tan, Ph.D., University of California Paul Wolfson, Ph.D., University of Chicago Richard Wyatt, Ph.D., University of California

ASSISTANT PROFESSORS

Clark Dean Horton, Ph.D., *Indiana University* Clifford Johnston, Ph.D., *Temple University* Françoise E. Schremmer, Ph.D., *University of Pennsylvania*

INSTRUCTOR

Robert A. Peloso, M.S., Carnegie Mellon University

Programs of Study

The Department of Mathematics and Computer Science offers the Master of Arts degree with options in pure mathematics, and mathematics education.

The first option is for students interested in furthering their mathematical background. It provides the foundation for continued work in mathematics leading to the Ph.D. in pure mathematics. The second option is primarily directed to teachers of mathematics who wish to strengthen their background in mathematics and mathematics education; in addition, it provides the foundation for the Doctor of Arts or the Ph.D. in mathematics education. The department also offers the Master of Science in computer science. See "Computer Science."

Admission to the M.A. Program

Mathematics Education Option

In addition to meeting the basic admission requirement of the University, applicants must have a bachelor's degree with a mathematics major and at least provisional teacher certification (Level I certification). Applicants must schedule an interview with the graduate coordinator of mathematics education prior to enrollment. Deficiencies, as determined by the graduate coordinator, may be removed by successfully completing appropriate course(s). Applicants will take the Graduate Record Examination (GRE).

Pure Mathematics Option

In addition to meeting the basic admission requirements of the University, applicants must schedule an interview with the department chairperson prior to enrollment. Applicants must have a minimum of 30 semester hours of mathematics, including a full treatment of calculus, at least one advanced undergraduate course in modern algebra, and one in advanced calculus.

Deficiencies in these areas may be removed by successfully completing MAT512 (Modern Algebra) and/or MAT541 (Advanced Calculus). Applicants will take the Graduate Record Examination (GRE).

Admission to the M.S. Program

See "Computer Science."

Requirements for the M.A. Degree

In addition to completing the course requirements shown below, candidates must pass a comprehensive oral or written examination.

MASTER OF ARTS IN MATHEMATICS

(33 semester hours)

Mathematics Education Option

One three-credit course in each:

12 credits

MTE 507 Foundations of Secondary Mathematics Education

MTE 508 Junior High School Mathematics - Curriculum, Instruction, and Assessment

MTE 512 Senior High School Mathematics - Curriculum, Instruction, and Assessment

MTE 604 Research Seminar

Pure Mathematics Option

One three-credit course in each:

15 credits

MAT 515 Algebra 1

MAT 521 Discrete Mathematics and Graph Theory

MAT 532 Geometry 1

MAT 545 Real Analysis I

STA 523 Mathematical Statistics I

Two three-credit electives: 6 credits

One to be a continuation of real analysis, algebra, or geometry.

One to be chosen from:

MAT 503 History of Mathematics

MAT 514 Theory of Numbers

MAT 516 Algebra II

MAT 533 Geometry II

MAT 546 Real Analysis II

MAT 570 Mathematical Models in the Life, Physical, and Social Sciences

MAT 575 Complex Analysis

STA 524 Mathematical Statistics 11

(Elective courses to be scheduled in advance on a rotating basis.)

MASTER OF SCIENCE IN COMPUTER SCIENCE

See "Computer Science."

COURSE DESCRIPTIONS COMPUTER SCIENCE

Symbol: CSC

See "Computer Science" for courses in the M.S. program and the certificate program.

- 501 Introduction to Computers (3) This course deals with defining computers and their capabilities, and exploring their history, societal implications of their usage, and application. A brief introduction to a programming language is provided, along with hands-on experience using wordprocessing, database, and spreadsheet programs (for nonmajors).
- 502 Computers for Managers (3) Management techniques for the evaluation, acquisition, and management of computer personnel and technology (for nonmajors). Required M.B.A. course.
- 515 Introduction to Computer Programming (3) The art and science of computing are introduced with emphasis on structured programming. Topics include looping, branching, arrays, and program development (for nonmajors). PRE-REQ: One year of high school algebra.

- 550 Computers in Education (3) An introductory computer course where educators will become familiar with microcomputers in a "handson" setting and will create a computer-based portfolio for use in their own professional setting.
- 552 Computer Applications in Education (3) Development of specialized instructional and management applications of hardware and software, including the use of desktop publishing.

MATHEMATICS

- Symbol: MAT
- 503 History of Mathematics (3) Development of mathematics from prehistoric time to present. Emphasis on changes in the mainstreams of mathematical thought through the ages.
- 513 Linear Algebra (3) Vectors, vector spaces, determinants, linear transformations, matrices, and bilinear and quadratic forms. PREREQ: MAT 512 or equivalent.
- 514 Theory of Numbers (3) Elementary number theory and selected topics in analytic number theory.
- 515 Algebra t (3) Elements of abstract algebra,

- groups, commutative ring theory, modules, and associative algebras over commutative rings. PRE-REQ: MAT 512 or equivalent. Offered in fall of odd-numbered years.
- 516 Algebra II (3) A continuation of MAT 515. Vector spaces, representation theory, and Galois theory. PREREQ: MAT 515. Offered in spring of even-numbered years.
- **521** Discrete Mathematics and Graph Theory (3) Techniques of problem solving, including the use of binomial coefficients, generating functions, recurrence relations, the principle of inclusion-exclusion, and Polya's Theorem.
- 532 Geometry (1) This course is a rigorous introduction to geometry from a transformational point of view, emphasizing Euclidean, hyperbolic, and/or projective geometry. Other topics such as Spherical geometry, symplectic geometry, or Affine geometry may be included if time permits.
- 533 Geometry II (3) A study of geometry using calculus as our main tool. The course covers the basics of differential geometry—parametrizations, tengent spaces, curvature, geodesics—leading to Stokes theorem and the Gauss-Bonnett theorem.

- Several examples will be studied in depth, including the sphere and the projective plane (which were introduced in the first course).
- 535 Topology (3) Filters, nets, separation axioms, compactness, connectedness, and uniform spaces.
- 541 Advanced Calculus (3) For students with background deficiencies in analysis. Ordinary and uniform limits; sequences of functions; and the Riemann integral. Offered in summer.
- 545 Real Analysis I (3) A rigorous study of realvalued functions of real variables. PREREQ: MAT 541 or equivalent. Offered in the fall of evennumbered years.
- 546 Real Analysis II (3) Continuation of MAT 545. PREREQ: MAT 545. Offered in the spring of odd-numbered years.
- 570 Mathematical Models in the Life, Physical, and Social Sciences (3) Techniques and rationales of model building. Applications to the life, physical, and social sciences.
- 572 Proseminar (3) Seminar in generating and solving problems in mathematics.
- 575 Complex Analysis I (3) A rigorous study of complex-valued functions of complex variables.
- 593 Topics in the History of Mathematics (3) Specialized topics in the history of mathematics announced at the time of offering. PREREQ: Consent of instructor.
- 595 Topics in Mathematics (3) Topics announced at time of offering. PREREQ: Consent of instructor. Offered as needed.
- 599 Independent Study (1-3) Offered as needed.610 Thesis (3-6) Offered as needed.

MATHEMATICS EDUCATION Symbol: MTE

- 501 Fundamental Concepts of Mathematics 1 (3) Selected topics that reflect the spirit and the content of the modern elementary school mathematics programs. Logic, sets, functions, number systems, integers, number theory, rational numbers, and problem solving, including estimations and approximations, proportional thinking, and percentages.
- 502 Fundamental Concepts of Mathematics II (3) A continuation of MTE 501. The real number system, probability, statistics, geometry, measurement (including the metric system), and problem solving. PREREQ: MTE 501.
- 507 Foundations of Secondary Mathematics Education (3) Research methods in mathematics education; forces which have shaped mathematics education; classroom implications of 20th-century learning theorists; assessment in the classroom; methods of organizing for instruction; cultural and gender considerations. Offered each summer.
- 508 Junior High School Mathematics— Curriculum, Instruction, and Assessment (3) This course will focus on the curricula, methods of instruction, and assessment techniques used to teach mathematics in a junior high school setting. Course topics will include: elementary school math-

- ematics from the perspective of a secondary school teacher, junior high school mathematics, algebra I, and general/consumer mathematics. Teachers also will explore strategies that can be used to integrate the calculator, computer, and new CD-ROM technologies into the mathematics classroom. Offered in the fall of odd-numbered years. PREREQ: MTE 507 for students in the M.A. program.
- 510 Algebra for the Elementary Teacher (3) An introduction to modern algebra. A comparative study of mathematics systems. PREREQ: MTE 501 or equivalent. Offered in fall of even-numbered years.
- 512 Senior High School Mathematics— Curriculum, Instruction, and Assessment (3) This course will focus on the curricula, methods of instruction, and assessment techniques used to teach mathematics in a senior high school setting. Course topics will include: geometries, algebra II, trigonometry, precalculus, and discrete mathematics. Teachers also will explore strategies that can be used to integrate the scientific and graphing calculator, computer, and the new CD-ROM technologies into the mathematics classroom. Offered in the summer of even-numbered years. PREREQ: MTE 507 for students in the M.A. program.
- 530 Geometry for the Elementary Teacher (3) Basic concepts in geometry. Euclidean geometry and postulative systems. PREREQ: MTE 501 or equivalent. Offered in fall of odd-numbered years.
- 551 Mathematics for the Disadvantaged (3) Examination of current programs in mathematics for the disadvantaged; discussion of the pertinent research literature; and development of materials and techniques for teaching the slow learner and low achiever.
- 553 Teaching Elementary School Mathematics I (3) In-depth treatment of strategies, methods, and materials for teaching the following concepts in an elementary classroom: place value; addition, subtraction, multiplication, and division of whole numbers; measurement; elementary number theory; geometry; fractions; and integers. PREREQ: MTE 501 or equivalent. Offered in spring of even-numbered years and in summer.
- 554 Teaching Elementary School Mathematics II (3) History and development of the modern elementary school mathematics programs. Theories and findings of recent and contemporary learning theorists are investigated. Modern organizational strategies surveyed, including team teaching, individualized instruction, open space, etc. contemporary instruction strategies, such as individualized learning systems, mathematical laboratories, and individually prescribed instruction, are studied. PREREQ: 553 MTE. Offered in spring of odd-numbered years.
- 561 Calculus for Teachers (3) Analytic geometry of both the straight line and conics, and elements of the calculus of functions of a single real variable are reviewed. Topics include limits, continuity, the derivative and integral and their applications, curve sketching, and polar coordinates. Emphasis on methods of teaching these topics to secondary school students.
- 562 Computer Applications for Elementary School Mathematics (3) The materials-oriented

approach to teaching elementary school mathematics, including cuisenaire rods, the geoboard, attribute games, tangrams, and multibase blocks. Emphasis on learners' participation in activities directly related to mathematics of the elementary school. Use of materials extends to all grade and ability levels.

599 Independent Study (1-3)

604 Research Seminar (3) This course will focus on the study of research in mathematics education. Contemporary topics of research will be discussed and perused. Students will be expected to report on a topic of research of their choosing. In addition, empirical study and design will be discussed along with data analysis and the reporting of results.

610 Thesis (3-6)

STATISTICS

Symbol: STA

- 521 Statistics I (3) For nonmathematics majors. Emphasis on applications to education, psychology, and the sciences. Distributions, measures of central tendency and variability, correlation, regression and hypothesis testing, and other topics.
- 523 Mathematical Statistics I (3) A rigorous treatment of probability spaces and an introduction to the estimation of parameters.
- 524 Mathematical Statistics II (3) Continuation of STA 523. Correlation, sampling, tests of significance, analysis of variance, and other topics. PREREQ: STA 523.
- 525 Probability (3) An advanced approach to the elements of probability. Discrete and continuous random variables, probability distributions, and sampling distributions.

SERVICE COURSES IN MATHEMATICS AND COMPUTER SCIENCE

COMPUTER SCIENCE (CSC)

- 501 Introduction to Computers
- 502 Computers for Managers
- 515 Introduction to Computer Programming
- 550 Computers in Education
- 552 Computer Applications in Education

MATHEMATICS EDUCATION (MTE)

- 501 Fundamental Concepts of Mathematics 1
- 502 Fundamental Concepts of Mathematics II
- 510 Algebra for the Elementary Teacher
- 550 Topics in Mathematics for Elementary School Teachers
- 553 Teaching Elementary School Mathematics I
- 558 Teaching Mathematics in the Junior High School
- 560 Teaching Algebra in the Secondary School
- 561 Calculus for Teachers
- 562 Computer Applications for Elementary School Mathematics

STATISTICS (STA)

521 Statistics I

Music

Dr. Mary Anne Rees, Dean Dr. Charles G. Price, Coordinator of Graduate Studies

Mission

The mission of the School of Music at West Chester University is to create a learning environment that provides the highest order of education in all major aspects of music, to establish a foundation for life-long growth in music, and to offer programs and degrees that are tradition based but future oriented. In pursuing this mission, we reaffirm our commitment to diversity within the School of Music. Our faculty members strive to be inspiring teachers as well as musical and intellectual leaders. Further, we endeavor to expand the music opportunities available to all University students and to enhance the quality of our community's musical life.

Programs of Study

The School of Music offers programs leading to the Master of Arts degree in music history, and the Master of Music degree in music education, performance, accompanying, music theory, music composition, and piano pedagogy. Course selections to meet degree requirements are made by candidates in consultation with their advisers and with consideration of the candidates' goals, abilities, needs, and interests.

Admission Requirements

In addition to meeting basic University requirements, listed under Admission, applicants for degree programs are considered on the basis of academic record, interviews, GRE Revised Music Test scores, portfolio review in composition, and auditions for performance programs.

Prior to enrollment all applicants must (1) take the GRE Revised Music Test and submit the results. The test is administered by the Educational Testing Service, P.O. Box 6000, Princeton, NJ 08541-6000; 609-771-7670. Application forms must be filed with the Educational Testing Service one month prior to the date of the examination. The GRE Revised Music Test is given at over 800 test centers across the country (including West Chester University) in February and December every year. A tape and booklet titled "Practicing to Take the GRE Revised Music Test" is available for purchase from the Educational Testing Service. (2) possess appropriate undergraduate degrees and may be required to remedy not more than 12 credits of deficiency (3) schedule interviews with the graduate coordinator and appropriate department chairperson in the School of Music.

The areas of concentration, directed electives, and free electives are described fully in a student handbook compiled by, and available from, the graduate coordinator of the School of Music.

Each degree candidate is individually responsible for satisfying degree candidacy and graduation requirements stated elsewhere in this catalog and for meeting deadline dates for the May, August, or December graduation, as appropriate.

Music Education

Dr. Belmain, Chairperson

PROFESSOR

Carol A. Belmain, D.M.A., Temple University

ASSOCIATE PROFESSORS

J. Bryan Burton, D.M.E., *University of Southern Mississippi* Colleen T. Ludeker, Ed.D., *West Virginia University*, Dalcroze License, *Manhattan School of Music*

ASSISTANT PROFESSORS

Karen L. Markey, M.Mus.Ed., West Chester University, Orff Certification, Levels I, II, III, DePaul University
 Jane T. Pippart, M.Mus.Ed., Holy Names College, Kodaly Emphasis. Certificate, Liszt Academy (Budapest, Hungary)

C. Floyd Richmond, D.A., Ball State University

MASTER OF MUSIC IN MUSIC EDUCATION

(30-34 semester hours)

Students may choose either the thesis program of 30 semester hours or the nonthesis program of 34 semester hours (with research, performance, Kodaly, or Orff-Schulwerk options). All programs

require completion of nine credits in three core courses: MUE 500, 503, and 510. All students in M.M. programs in music education also must complete a comprehensive exit examination.

Additional course requirements are:

Thesis program: Six credits in music education; three credits in music history; three credits in music theory; three credits in concentration electives; and six credits in research (MUE 691 and 699).

Nonthesis programs:

Performance: Six credits in music education; three credits in applied music; three credits in music theory; three credits in music history; three credits in free electives; three credits in concentration electives; recital (MUE 698 and VOI/AIM/PIA 696). Candidates desiring to pursue the recital option in voice must audition before the voice jury and receive permission to pursue that option before earning 15 graduate hours or after completing VOI 543, whichever comes first.

Research Report: Six credits in music education; three credits in applied music; three credits in music theory; three credits in music history; three credits in free electives; three credits in concentration electives; four credits in research (MUE 691 and 692).

Kodaly Concentration: 18 credits in Kodaly (MUE 525-27, 540-1, four credits in directed electives), and three credits in music history.

Orff-Schulwerk Concentration: 15 credits in Orff-Schulwerk (MUE 530-35); three credits of music history; and seven credits of free electives.

COURSE DESCRIPTIONS MUSIC EDUCATION

Symbol: MUE (unless otherwise shown)

500 Methods and Materials of Research (3) Basic techniques and procedures. Major types of research. Methods for locating, evaluating, and interpreting evidence. Preparation of a research outline.

503 Philosophical Foundations of Music Education (3) Historical and philosophical foundations of music education. Application of principles of education to music. Major emphasis on development of a philosophy of the discipline. 510 Current Trends in Music Education (3) Present practices and emerging developments in music education.

511 Vitalizing Music in the Elementary School (3) Exploration and examination of current pedagogy, materials, and technology available to enhance learning through music in the elementary classroom. ELEMENTARY EDUCATION MAJORS ONLY.

512 Teaching Music Listening Skills and Activities (3) Analysis of musical concepts within selected compositions with subsequent design of sequential teaching-learning strategies for all levels: K-12. MUSIC MAJORS ONLY.

515 Computer Applications in Music Education (3) Study of recent technological advances and their applications to include computer-assisted software, music performance and printing, synthesizers, sequencers, MIDI communication standard, strategies and technologies for classroom, interactive video, artificial intelligence, expert systems, and HyperCard.

516 Administration and Supervision of School Music (3) Administrative problems, curricular content and scheduling, in-service training of teachers, and specialized supervisory techniques for the music curriculum. PREREQ: Teaching experience.

517 Psychology of Music (3) In-depth study of learning theories as related to music education and the nature of music.

518 Multicultural Perspectives in Music Education (3) Understanding the diversity of musical expressions of our planet and the multicultural musical dynamics of American culture; provides music educators with the information, materials and teaching strategies required for the creation and maintenance of a multiculturally based music curriculum.

522 Music in the Middle School (3) Review and critical analysis of music education in the middle school; philosophies, curriculum, practices, and personnel.

525 Kodaly Techniques: Level 1 (4) Designed

to present lesson-planning strategies and musicianship skills for teaching Kodaly-based methodology in the primary grades and to develop the student's ability to sing pentatonic literature and basis rhythms at sight in a classroom setting.

Kodaly Techniques: Level II (4) Designed to present lesson-planning strategies and musicianship skills for teaching Kodaly-based methodology in the intermediate and secondary grades to develop the student's ability to sing diatonic literature and advanced thythms at sight in classroom settings. PREREQ: MUE 525 527 Kodaly Techniques: Level III (4) Strategies and materials for classical music and listening lessons will be presented as well as teaching techniques for the secondary classroom. Students are expected to submit a 30-45 minute teaching tape for purposes of coordinating all Kodaly teaching skills PREREQ: MUE 525 and 526. 528 Music in Special Education (3) Characteristics of special pupils; adaptation of teaching techniques; materials curriculum. 529 Dalcroze Eurhythmics (3) A pedagogical approach to the study of enacting musical meanings in physical space. Refining the sensing, analyzing, and improvising of musical concepts by understanding how music is produced. 530 Orff-Schulwerk—Level 1 (1-4) Designed to develop fundamental Orff processes through the acquisition of basic musical skills, soprano recorder techniques, and movement concepts Level I is limited to pentatonic activities (credit placement determined through advisement) 531 Orff-Schulwerk-Level II (4) Designed to develop a theoretical comprehension of the evolution of elemental music through the Baroque period. Liturgical and diatonic modes are used as vehicles in developing harmonic concepts. PRE-REQ: MUE 530 or Level 1 Orff Certification from an AOSA accredited program. Admission to program by audition.

532 Orff-Schulwerk-Level III (4) Designed to develop comprehension of 20th-century styles, and theoretical and performance practices of Western and non-Western music, while using both ethnic and popular means. PREREQ: MUE 531. 533 Orff-Schulwerk: Recorder Ensemble (1) A culmination of recorder instruction, through performance, analysis, and discussion, into a survey of repertoire suitable for recorder consort and consort with subordinate instruments. PRE-REQ: MUE 531. Open, as an elective, to students demonstrating playing proficiency on soprano and alto recorder. Admission by audition. 534 Orff-Schulwerk: Movement (1) An indepth study to develop visual and spacial awareness, coordination and body control, imagination, improvisation, and kinesthetic understanding of musical elements as they interact within the Schulwerk process. PREREQ: MUE 531. Open, as an elective, to students demonstrating proficiency in creative movement, improvisation, and ethnic dance. Admission by audition. 535 Orff-Schulwerk: Instrumentarium Practicum (1) A survey of works by Carl Orff and Gunild Keetman, as well as selected materials arranged for the instrumentarium which require advanced performance skills. PREREQ: MUE 531. Open, as an elective, to students demonstrating playing proficiencies using basic techniques on unpitched and pitched instruments, as well as improvisational skills. Admission by audition. 536-539 Workshops (1-3) Participation-oriented workshops designed to meet specific needs in music and music education and to develop skills for practical application in school and professional settings. (The prefixes that apply only to these workshops are MWE, Music Education; and MWH, Handbells.)

540 Kodaly: Conducting (3) Designed to acquaint the student with the application and development of children's choral literature in performance using composed literature of Kodaly and various other composers who have written for children.

541 Kodaly: Folk Music (3) Designed to review and identify folk music genre, identify principal researchers and collections, analyze materials collected, and submit project containing all materials.

550 Related Arts Pedagogy in Music Education (3) Historical background of the related-arts movement. Principles of related-arts teaching related to musical elements, forms, and styles, with appropriate teaching techniques at specified grade levels. Materials for school music programs: basal music series, other texts and literature, and resources in related arts. Demonstration lessons and unit planning.

679 Special Subjects Seminar (1-3) Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

681-83 Independent Study in Music (1-3) Individual research under the guidance of a faculty member. PREREQ: Permission of instructor.

691 Research Seminar in Music (2) A research proposal with supporting procedures is developed. Guidance in individual research topics, with tutorial assistance in form and style of research writing.

692 Research Report (2)

698 Recital Research (1)

699 Thesis (3)

Music History and Literature

Dr. Murray, Chairperson

PROFESSORS

Sterling E. Murray, Ph.D., University of Michigan Liselotte M. Schmidt, Ed.D., Columbia University

ASSOCIATE PROFESSOR

Charles G. Price, Ph.D., Stanford University

ASSISTANT PROFESSORS

Scott L. Balthazar, Ph.D., University of Pennsylvania Thomas Winters, Ph.D., University of Pennsylvania

Admission Requirements

In addition to the general requirements for admission to degree programs in music, Music History applicants must be tested in the reading knowledge of a foreign language, preferably French or German. Students found lacking in a reading skill in a foreign language must eliminate this deficiency before admission to degree candidacy.

MASTER OF ARTS IN MUSIC HISTORY

(33 semester hours)

Fifteen credits in five courses offered by the Department of Music History and Literature (one three-credit course must be chosen from each of the following three groups: MHL 640-641, 642-643, and 644-645); nine credits in research and bibliography (MHL 670, 698, and 699); nine credits in electives (music and related disciplines); defense of thesis serves as comprehensive exit examination.

COURSE DESCRIPTIONS MUSIC HISTORY AND LITERATURE Symbol: MHL

- 510 Collegium Musicum (1) A chamber ensemble specializing in the use of authentic instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Open by audition.
- 550 Seminar in Musicology (3) Bibliographical materials, introduction to musicological research, development of research techniques, and writing skills. Required of M.A., (music history) candidates. PREREQ: Permission of instructor.
- 620 World Music (3) An introduction to the study of tribal, folk, popular, and oriental music and ethnomusicological methodology. Open to music majors and nonmusic majors without prerequisites.
- 622 History of Jazz (3) A survey of the history of jazz, including representative performers and their music.
- 640 Medieval Music (3) Development of plainsong and secular monody, and beginnings and early history of polyphony to the 14th century. Consideration of contemporary trends in the visual arts, history, and literature.
- 641 Renaissance Music (3) Sacred and secular music in the Age of Dufay; changing forms and styles through the music of the Franco-Flemish groups; the frottola and related forms; and Palestrina and his contemporaries. Brief consideration of contemporary trends in the visual arts, history, and literature.

- 642 Baroque Music (3) Styles and forms of the European repertoire; contributions of the major composers; and the role of music and musicians in the society of the period.
- 643 Late 18th-Century Music (3) Changing styles and forms in the sons of J.S. Bach; the Viennese preclassicists; the Mannheim School; opera; Joseph and Michael Haydn, Mozart, and their contemporaries; and the early works of Beethoven.
- 644 19th-Century Music (3) Historical developments during the Romantic period (ca. 1800-1900). Analysis of changes and trends, and comparative aspects of new forms.
- 645 20th-Century Music (3) Chronological survey of 20th-century music. Development of styles. Technical aspects of changes occurring in melody, rhythm, orchestration, texture, tonality, and form.
- 651 Music in the United States (3) Analysis of music and musical trends in America from the Pilgrims to the present. PREREQ: MHL 221-222 or permission of instructor.
- 654 History of Opera (3) The composers and their major contributions to the various schools of opera. PREREQ: MHL 221-222 or permission of instructor.
- 655 History of Orchestral Music (3) How the symphony orchestra developed from the Baroque period to the present in its function, literature, instrumentation, and performance practices.

 PREREQ: MHL 221-222 or permission of instructor.

 658 Performance Practices (3) A consideration

- of the special problems encountered in the stylistic realization and performance of music from the Medieval through the Romantic eras. Particular attention will be focused on original sources, period instruments, and performance problems. PREREQ: MHL 221-222 or permission of instructor.
- 662 Mozart and His Works (3) A study of the life and music of Wolfgang A. Mozart with special reference to the period in which he lived. Taught in summers in Salzberg, Austria.
- 679 Topics in Music History 1 (1-3) Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.
- 680 Topics in Music History II (1-3) Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.
- 681-83 Independent Study in Music History (1-3) Individual research under the guidance of a faculty member. PREREQ: Permission of chairperson.
- 698 Directed Research in Musicology (3) Bound and shelved in the library, the thesis in music history stands as an example of the student's ability to plan, organize, and direct a research effort to discover, develop, or verify knowledge in music history. This course is designed to assist the graduate music history major to focus research pursuits toward formulation of a potentially successful thesis topic.
- 699 Thesis in Music History (3)

Instrumental Music

Dr. Grabb, Chairperson

PROFESSOR

Kenneth L. Laudermilch, D.M.A., Catholic University of America

ASSOCIATE PROFESSORS

Sylvia Moss Ahramjian, M.M., Indiana University Terry E. Guidetti, M.Mus., Northwestern University Ted Hegvik, M.M., University of Michigan Eugene Klein, M.M.E., Indiana University Emily Newbold, D.M.A., Combs College H. Lee Southall, M.A., Trenton State College

ASSISTANT PROFESSORS

Henry Grabb, D.M., Florida State University Carol Isaacson-Briselli, M.M., Temple University Glenn Lyons, M.Mus., Peabody Institute, Johns Hopkins University Owen Metcalf, D.M., Indiana University Jane Richter, D.M.A., Combs College

INSTRUCTORS

Peter Paulsen, B.Mus., West Chester University John Villella, M.Mus., West Chester University Larry McKenna

Admission Requirements

In addition to the general requirements for admission to degree programs in music, performance applicants must (1) schedule an interview with the graduate coordinator and the department chairperson; (2) submit a repertoire list; and (2) demonstrate performance ability at an advanced level by performing for an audition committee.

MASTER OF MUSIC IN PERFORMANCE

(30 semester hours)

Instrumental Concentration: Nine credits in individual lessons at the advanced level (XXX 541-43) and Recital (AIM 697); AES 511; 5-6 concentration credits (selected from AIC 512, and ALC 511, 531, and 541 or 551); three credits in music history; three credits in music theory; 6-7 credits of free electives; and completion of a comprehensive exit examination.

COURSE DESCRIPTIONS INSTRUMENTAL MUSIC

INDIVIDUAL LESSONS: Prefixes: BAR, BAS, BSN, CLT, FLU, FRH, GTR, HRP, OBO, PER, SAX, TBA, TPT, TRB, VCL, VLA, VLN

501-02 Lessons at the Minor (beginning)

Level (1)
511-14 Lessons at the Major Level (1)

541-43 Lessons at the Advanced Level (3)

For performance majors only. AEB 511 Marching Band (1)

AEB 521 Concert Band (1)

AEB 531 Symphonic Band (1) AEB 541 Wind Ensemble (1)

AEO 531 Chamber Orchestra (1) AEO 541 Symphony Orchestra (1)

AES 511 Recital-Instrumental Ensemble (2)

Program selection, recruitment of players, rehearsal, and performance of music for small

instrumental ensembles.

AES 512 Instrumental Ensemble (1)

AIC 512 Advanced Instrumental Conducting (2) PREREQ: Undergraduate conducting.

AIM 511 Marching Band Techniques and Materials (3) A survey of the function of the total marching band and of each component in the

AIM 679-80 Special Subjects Seminar-Instrumental (1-3) Instrumental music topics presented by faculty and/or visiting lecturers.

AIM 681-83 tndependent Study in Music (1-3) AIM 696 Recital-Instrument (1) For music education majors in lieu of research report. PRE-REQ: Jury exam.

AIM 697 Recital-Instrument (1) For performance majors. PREREQ: Jury exam.

INSTRUMENTAL LITERATURE COURSES: A survey of solo, ensemble, and teaching literature

through performance and the use of scores and recordings.

ALC 511 Brass Literature (3)

ALC 531 String Literature (3)

ALC 541 Woodwind Literature (3) ALC 551 Instrumental Literature (3)

MASTER CLASSES: Performance techniques and stylistic interpretation of instrumental solo works. PREREQ: Performance ability at the major level.

AMC 511 Master Class-Brass (1)

AMC 521 Master Class-Percussion (1)

AMC 531 Master Class-Strings (1)

AMC 541 Master Class-Woodwind (1)

MWB 536-39 Marching Band Workshop (1-3) A comprehensive marching band conference for the total marching band program. Foremost authorities offer instruction in their fields of specialization.

Keyboard Music

Prof. Aliferis, Chairperson

PROFESSORS

Robert M. Bedford, D.Mus., Catholic University of America Robert E. Pennington, D.Mus., Northwestern University Robert Schick, A.Mus.D., Eastman School of Music Richard K. Veleta, D.Mus., Northwestern University Jacques C. Voois, D.M.A., Peabody Conservatory of Music, Johns Hopkins University

ASSOCIATE PROFESSORS

Shirley Pethes Aliferis, M.Mus., *Indiana University* Praxiteles Pandel, M.S., *The Juilliard School*

ASSISTANT PROFESSOR

Timothy V. Blair, D.Mus., Catholic University of America

INSTRUCTOR

Gordon Turk, D.M.A., Manhattan School of Music

Program of Study

The Department of Keyboard Music offers three degree programs at the graduate level - the Master of Music in performance (piano, harpsichord, or organ), Master of Music in accompanying, and Master of Music in piano pedagogy. All programs require completion of three semester hours each in music history and in music theory. In addition, all students must complete a comprehensive exit examination.

MASTER OF MUSIC IN PERFORMANCE (30 semester hours)

Admission Requirements

In addition to the general requirements for admission to degree programs in music, performance applicants must: (1) schedule an interview with the graduate coordinator and the department chairperson, (2) submit a repertoire list, and (3) demonstrate performance ability at an advanced level by performing for an audition committee.

Area of Concentration (piano, harpsichord, or organ):

Nine credits in individual lessons at the advanced level (HAR/ORG/PIA 541-43); six credits in keyboard literature (PIA 611, 623-626) or organ literature (ORG 551-552); three credits of concentration electives from KEN 546, MAK 558, ORG 561-62, PIA 572-73, or PIA 582-83; four credits of free electives; two credits of recital (HAR 697, ORG 697, PIA 697); three credits in music history; three credits in music theory; and completion of a comprehensive exit examination.

MASTER OF MUSIC IN ACCOMPANYING

(30 semester hours)

Admission Requirements

In addition to the general requirements for admission to degree programs in music, accompanying applicants must (1) submit transcripts showing completion of a bachelor's degree in music, including six semester hours of a foreign language (French, German, or Italian preferred) and (2) demonstrate accompanying ability at an advanced level by performing for an audition committee.

Area of Concentration: Four credits in individual lessons at the advanced level (PIA 570-71); eight credits of ensemble (PIA 574-75); nine credits in cognate courses (PIA 572-73, 576-77); and three credits in free electives (VOC 511-14, VOC 515-16 preferred); three credits in music history; three credits in music theory; and completion of a comprehensive exit examination.

MASTER OF MUSIC IN PIANO PEDAGOGY (34 semester hours)

Admission Requirements

In addition to the general requirements for admission to degree programs in music, piano pedagogy applicants must schedule an entrance examination, which will consist of scales, arpeggios, solo repertoire from various stylistic periods, and sight reading. Applicants whose undergraduate degrees are not in music may be accepted into the program if they demonstrate equivalent background in piano.

Area of Concentration: Four credits in individual lessons (PIA 578-79); 15 credits in piano pedagogy (PIA 580-83); six credits in keyboard literature (PIA 611, 623-626); and three credits of supportive work in methodology, psychology, or philosophy of education (selected from the departments of Music Education; Childhood Studies and Reading; Psychology; or Counselor, Secondary, and Professional Education); three credits in music history; three credits in music theory; and completion of a comprehensive exit examination.

COURSE DESCRIPTIONS KEYBOARD MUSIC

Symbol: HAR, KEN, MAK, MWP, ORG, PIA

501-2 Individual Lessons at the Minor Level in Piano, Organ, Harpsichord (1) Individual, half-hour lessons once weekly. An elective course for all graduate students.

511-14 Individual Lessons at the Major Level in Piano and Organ (1) Individual half-hour lessons. Continued study in the development of repertoire and performing skills. Students may be given permission to register for two course numbers in the same semester, earning the second credit by doing additional outside work and performing in a recital. PREREQ: Completion of the performance major requirements at the undergraduate level or admission by audition. PIA 525 Piano Technique (3) An exploration of the many approaches to acquiring and teaching piano technique, the correlation between technique and musical style, how to practice and analyze physiological movements.

541-43 Individual Lessons at the Advanced Level in Piano, Organ, and Harpsichord (3) Individual, half-hour lessons once weekly. Advanced studies leading to a full-length recital at the master's level. PREREQ: Completion of the performance major requirements for the Bachelor of Music degree or admission by audition.

MWP 536-539 Piano Workshop (1-3) MWS 536-539 Contemporary Applications of Keyboard Synthesizers (3) A hands-on workshop involving programming techniques for synthesizers and the study of MIDI networks. Performance and composition will be emphasized.

KEN 546 Keyboard Ensemble (2) Performance of duet and two-piano literature.

ORG 551 Organ Literature I (3) A survey of literature for the organ from the 13th century to the Baroque period. The influence of the organ on the literature. Recordings and performance by organ majors.

ORG 552 Organ Literature II (3) A survey of literature for the organ from J.S. Bach to the present. The influence of the organ on the literature. Recordings and performance by organ majors.

MAC 558 Master Class (Organ) (1-2)
MAK 558 Master Class (Keyboard) (1-2)
Weekly performance sessions for advanced students.

ORG 561 Accompanying (Organ) (3) Performance of vocal and instrumental accompanying literature for organ from all periods. Performance and reading sessions.

ORG 562 Service Playing (Organ) (3) A survey of problems in service playing for the organist. Hymn accompaniment, improvisation, conducting from the organ, and literature for the service. Observation of service playing when possible. PlA 570-71 Individual Lessons at the Advanced Level for Accompanists (2) Individual, half-hour lessons once a week to train pianists in playing accompaniments. PREREQ:

Admission to the M.M. degree in accompanying. PIA 572-73 Accompanying I, Vocal; II, Instrumental (3) Survey of accompanying literature: (I) art songs, recitatives, cantata, opera, and oratorio arias; and (II) strings, winds, and brass. Performance and reading in class. PIA 574-75 Ensemble I, II (4) Accompanying in teaching studies for large groups (charges)

in teaching studios for large groups (choruses), for various ensembles (including trios and quartets), and for faculty, B.M., M.M., general, and senior student recitals.

PIA 576 Harpsichord and Continuo Realization (1) An introduction to harpsichord playing and the principles of continuo realization.
PIA 577 Transposition and Score Reading (2) Training in score reading and transposition at the keyboard.

PIA 578 Individual, half-hour lessons for students of piano pedagogy (2) PREREQ: Admission to the pedagogy concentration. PIA 579 Individual, half-hour lessons for students of piano pedagogy (2)

PIA 580 Group Piano Pedagogy (4) Procedures and materials for group piano instruction. Emphasis on developing comprehensive musicianship through an interwoven study of literature, musical analysis, technique, improvisation, ear training, harmony, transposition, and sight reading. Includes practicum in group piano instruction.

PIA 581 Piano Pedagogy I (4) An in-depth study of materials available to the studio piano teacher for the elementary levels. Discussions include different methods, technique, harmony, ear training, and sight reading. Includes practicum in individual instruction.

PIA 582 Piano Pedagogy II (4) An in-depth study of repertoire and materials available to the studio piano teacher for the intermediate levels. Discussions of related concerns, such as memorization, practice techniques, developing technique through literature, principles of fingering, and sight reading. Includes practicum in individual instruction.

PIA 583 Selected Topics in Piano Pedagogy (3) Further exploration of the goals and objectives of piano study through presentation of selected topics and continued practicum in individual instruction.

PIA 623 Baroque Keyboard Literature (3) The Renaissance through development of variation form and dance suite. Emphasis on performance practices, realizing ornament signs and figured basses; transferral to the modern piano; in-depth study of works of Handel, J.S. Bach, and D. Scarlatti. Some student performance required. PIA 624 Classical Piano Literature (3)

Literature for the early piano (1750-1830). Origin and development of the sonata and performance practices of homophonic style. Music of the sons of Bach, Haydn, Mozart, and Beethoven. Sound and structure of the early piano. Some student performance required.

PIA 625 Romantic Piano Literature (3) Analysis of piano styles of Schubert, Chopin, Mendelssohn, Schumann, Liszt, Brahms, Faure, Mussorgsky, Tchaikovsky, and Grieg. Performance practices. The virtuoso etude and problems of technical execution. Some student performance required. PREREQ: PIA 426 (Keyboard Literature II) or equivalent.

PIA 626 20th-Century Piano Literature (3) Seminal works and styles of this century. Albeniz, Rachmaninoff, Debussy, Ravel, Prokofiev, Hindemith, Schoenberg, Bartok, and American composers. Some student performance required. PREREQ: MTC 213 (Theory of Music IV) or equivalent.

PIA 608 The Music of Chopin (3) A comprehensive study of the contributions of Frederic Chopin to keyboard literature.

PIA 611 The Piano Concerto (3) A chronological presentation of the development of the piano concerto; performances, problems, and practices will be emphasized. Covers from J.S. Bach to present.

PIA 679-680 Special Subjects Seminar (1-3) Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

PIA 681-683 Independent Study in Music (1-3)

PIA 695 Recital (1) A full or half recital of concert works or pedagogical pieces, or a lecture-recital. Required of candidates for the Master of Music in piano pedagogy. PREREQ: Approval by committee examination.

PIA 696 Recital (1) A shared (half) recital open to candidates for the Master of Music degree (music education concentration). In lieu of research report. Program notes required. PRE-REQ: Approval by committee examination. PIA 697 Recital (2) A full public recital, demonstrating an understanding of various performance styles and an ability to perform literature from several periods. Required of candidates for the Master of Music in performance. PREREQ: Approval by committee examination.

Music Theory and Composition

Dr. McVoy, Chairperson

PROFESSORS

James E. McVoy, Ph.D., Eastman School of Music Larry A. Nelson, Ph.D., Michigan State University James D. Sullivan, Ph.D., Eastman School of Music

ASSISTANT PROFESSORS

Sharon L. Hershey, Ph.D., University of Pennsylvania Robert Maggio, Ph.D., University of Pennsylvania Igor Popovic, Ph.D., Yale University

Admission Requirements

In addition to the general requirements for admission to degree programs in music, theory and/or composition applicants must: (1) schedule an interview with a faculty committee appointed by the chairperson of the Department of Music Theory and Composition; and (2) demonstrate sufficient pianistic ability, sight singing, and

aural perception to meet the demands of the program. In addition, composition applicants must submit original works showing technical facility in composition.

MASTER OF MUSIC IN THEORY

(30 semester hours)

Three credits in music history; 15 credits in music theory (selected from MTC 512, 517, 541, 544, 546, and 563); six credits in concentration electives; three credits of free electives; three credits of thesis (MTC 697). The thesis defense serves as a comprehensive exit examination.

MASTER OF MUSIC IN COMPOSITION

(30 semester hours)

Three credits in music history; MTC 512, 513, and 514 (nine credits); 12 credits in music theory, selected from MTC 517, 541, 542, 544, 545, 546, 550, 563, and 564; three credits of free electives; and three credits of thesis (MTC 699). The thesis defense serves as the comprehensive exit examination.

COURSE DESCRIPTIONS MUSIC THEORY AND COMPOSITION Symbol: MTC (unless otherwise indicated)

512-14 Advanced Composition I, II, and III (3) Free composition in larger forms for ensembles, solo voice and chorus, chamber groups, and orchestra. PREREQ: MTC 213 (Theory of Music IV) or equivalent.

517 Electronic Music (3) Materials and techniques of electronic music and their use in composition. Laboratory experience in the composition of electronic music. PREREQ: Permission of the instructor.

MWJ 536-39 Jazz Studies Workshop (1-3) A workshop for the study and performance of jazz. Arranging and ensemble performance opportunities. A separate brochure describes summer workshops.

541 Advanced Orchestration (3) Original composition of arrangement for orchestra. PREREQ: A knowledge of the instruments of the orchestra and experience in their use.

542 Advanced Musical Form (3) A detailed study of musical form, with emphasis on modifications of sonata form, vocal and instrumental forms of Baroque music, and forms that are unique.

544 Advanced Counterpoint I (3) Contrapuntal techniques of the 18th century. Chorale prelude and invention.

545 Advanced Counterpoint II (3) Continuation of MTC 544. Includes the canon, invertible counterpoint, and fugue. PREREQ: MTC 544 or permission of the instructor.

546 Techniques of Early 20th-Century Music (3) A study of compositional techniques in representative vocal and instrumental works of the first two decades of this century.

550 Acoustics of Music (3) The study of sound: its production, transmission, and reception. Musical instruments, the acoustics of rooms, and the physical basis of scales.

561 Jazz Harmony and Arranging (3) 562 Advanced Jazz Harmony and Arranging (3) A study of improvisation and arranging, literature, and other aspects of an important phase of popular styles.

564 Performance Practices in Contemporary Music (3) This course will provide the following opportunities: (1) the participants will study technical problems of understanding new notation (e.g., graphic scores, proportional scores, multiphonics, microtones, metric modulation, asymmetrical rhythm groupings, prose scores, etc.), and

will develop a reasonable facility in performing scores that include these techniques; (2) an ensemble, for which composition students may compose; and (3) the establishment of an ensemble, which may publicly perform new music. 579 Seminar in Music Theory (1-3) Special topics seminar designed to meet specific needs of music majors in the area of theory research.

591 Advanced Chromatic Harmony (3)

592 Advanced Ear Training (2)

679 Special Subjects Seminar (1-3) Significant topics presented by faculty members or visiting lecturers. Designed to meet specific needs of the seminar group.

681-83 Independent Study in Music (1-3) Individual research under the guidance of a faculty member. PREREQ: Permission of instructor. 691-92 Research Seminar in Music (1-2) A research proposal with supporting procedures is developed. Guidance in individual research topics with tutorial assistance in form and style of research writing.

697 Theory Thesis (3) For graduate majors in theory only.

698 Research Report (1)

699 Musical Composition Thesis (3) For graduate majors in composition only.

Vocal and Choral Music

Dr. Sprenkle, Chairperson

PROFESSOR

Raymond Friday, Ph.D., New York University

ASSOCIATE PROFESSORS

Lois V. Alt, M.Mus., University of Michigan W. Larry Dorminy, D.Mus., Indiana University David Sprenkle, D.M.A., University of Maryland G. Alan Wagner, M.F.A., Carnegie Mellon University

ASSISTANT PROFESSORS

Kathryn Chilcote, D.M.A., University of Oregon Donald Nally, M.M., Westminster Choir College Jane Wyss, D.M.A., University of Texas at Austin

Admission Requirements

In addition to the general requirements for admission to degree programs in music, performance applicants must: (1) demonstrate advanced performance ability; (2) audition with a program, including selections drawn from Italian art song, German Lied, French melodie, opera, and oratorio; (3) demonstrate diction competency in Italian, German, and French; (4) submit a repertoire list; and (5) schedule an interview with the graduate coordinator and the department chairperson. Students lacking nine credits of undergraduate foreign language must remove this deficiency before candidacy.

MASTER OF MUSIC IN PERFORMANCE

(30 semester hours)

The program requires completion of three credits in music history and three credits in music theory, as well as the concentration described below.

Voice Concentration: Nine credits in individual lessons at the advanced level (VOI 541-43) and a recital (VOI 697); VOC 524 (three credits); 4-6 credits (selected from VOC 511-16, 526, 529, 546, and 591, and MHL 654), 4-6 credits of free electives; and completion of a comprehensive exit examination.

COURSE DESCRIPTIONS **VOCAL-CHORAL**

Symbol: CHO

511 Masterworks Chorus (1) A large mixed chorus presenting oratorios, masses, and advancedlevel choral literature. Permission of instructor.

611 Chamber Choir (1) A consort of 15-25 singers specializing in the performance of sacred and secular vocal music of the Renaissance and early Baroque periods. By audition.

612 Concert Choir (1) A mixed chorus of 35-45 singers performing sacred and secular choral literature of all periods and styles. By audition.

Symbol: VOC

511 Master Class — Baroque (1) Discussion and performance of songs from the Baroque period.

512 Master Class — German Lied (1) Discussion and performance of German art song. 513 Master Class - French Melodie (1) Discussion and performance of late French art song. 514 Master Class - 20th-Century Art Song

(1) Discussion and performance of art songs from the 20th century.

515 English-Italian Diction (3) English, Italian, and Latin diction in a laboratory course to establish correct pronunciation in singing. The phonetics of these languages are used in selected song repertoire.

516 French-German Diction (3) French and German diction in a laboratory course to establish correct pronunciation in singing. The phonetics of these languages are used in selected song

524 Musico-Dramatic Production (3) Techniques of producing musical plays. Preparation for roles, coaching, and conducting rehearsals. May lead to a public performance of the material studied.

526 Choral Literature (3) Examples of choral music from the various musical periods. Primarily larger works.

529 Vocal Literature (3) Classic song literature, lieder, melodie, and contemporary art songs are discussed.

536-39 Vocal-Choral Workshops (I-3) Participation-oriented workshops designed to meet specific needs in vocal-choral music.

546 Vocal Ensemble (2) Self-study in the performance and preparation of small ensembles. Project must have the approval of the department

591 Vocal Pedagogy (3) Principles and techniques of teaching voice.

679-80 Special Subjects Seminar (1-3) Significant topics presented by faculty or visiting lecturers

Independent Study (1) 681

682 Independent Study (2)

683 Independent Study (3)

691 Research Seminar in Music (2)

692 Research Seminar in Music (1)

Symbol: VOl

501-02 Individual Lessons at the Minor Level (1) An elective course for graduate students.

511-14 Individual Lessons at the Major Level (1) Voice majors in the Master of Music in music education program. PREREQ: Completion of the undergraduate voice major requirements or by audition.

541-43 Individual Lessons at the Advanced Level (3) Advanced vocal studies culminating in a full master's recital. PREREQ: Completion of the performance requirements for the Bachelor of Music in voice program or admission by audition.

696 Recital (1) A shared (half) public recital for candidates in the Master of Music Education program in lieu of a research report. Candidate must write approved program notes. PREREQ: Approval by the examination committee.

697 Recital (2) A full public recital demonstrating an understanding of various performance styles and the ability to perform. Required of candidates for the Master of Music in voice degree. PREREQ: Approval by the examination committee.

Symbol: VOW

521 The Broadway Musical (3) Surveys the American musical theatre, past and present. Elements of producing the American musical in school settings.

522 The Musical Revue (1-3) Explores the concept of choral music in motion and the necessary techniques and skills for mounting a successful choral ensemble.

Nursing

105 Nursing Building West Chester University West Chester, PA 19383 610-436-2219

Prof. Coghlan Stowe, Chairperson Dr. Hickman, Coordinator of Graduate Studies

PROFESSOR

Susan C. Slaninka, Ed.D., Temple University

ASSOCIATE PROFESSORS

Barbara F. Haus, Ed.D., Lehigh University Janet S. Hickman, Ed.D., Temple University Eileen G. Perciful, D.N.Sc., Widener University

ASSISTANT PROFESSOR

Ann Coghlan Stowe, M.S.N., University of Pennsylvania

Admission Requirements

The minimum admission standards for the Department of Nursing are a BSN degree from an NLN-accredited program, an undergraduate GPA of at least 2.5, a course in statistics, a course in physical assessment, GRE verbal and quantitative score or MAT score, current licensure as a registered nurse (Pennsylvania licensure required prior to the clinical practicum), at least two years of recent full-time experience as a nurse providing direct clinical care, and three letters of recommendation from individuals familiar with the applicant's academic and/or professional qualifications.

MASTER OF SCIENCE IN NURSING

(36 semester hours)

Concentration: Community Health Nursing

The Master of Science in Nursing program will prepare professional nurses for leadership roles in community health nursing through indepth consideration of community-based health care delivery systems, preparation in a functional role, and the use of critical inquiry and scholarship to improve the practice of nursing.

The program curriculum, developed in coordination with nurse educators, clinicians, and professional societies, offers a choice of instructional focus. The student will select either an education or administration functional component within the community health concentration. All students pursuing the MSN degree are required to earn six credits in nursing research to complete the program.

The program was developed in accordance with the professional standards of the National League for Nursing. The department will continue striving to maintain the highest academic standards at all professional levels and to achieve professional approval and accreditation.

Functional Component: Nursing Education

The focus in nursing education will enhance the skills of the professional nurse in curriculum development and teaching competencies in nursing. Relevant electives (three credits) are selected under advisement.

Functional Component: Nursing Administration

The nursing administration focus will facilitate preparation of graduate nurses as clinical specialists, especially in the fields of gerontol-

ogy and chronic illness. This focus is designed in anticipation of a more severely ill case mix in acute-care settings, as well as accelerated use of HMO's, home health agencies, and other types of community-based care. Relevant electives (three credits) are selected under advisement.

Requirements for the Master of Science in Nursing (36 semester hours)

- 1. Core Component 18 semester hours BIO 584 Epidemiology (3) or HEA 520 Scientific Basis for Health (3)
 - NSG 501 Nursing Theories and Issues (3)
 - NSG 502 Perspectives of Community Health Nursing (4)
 - NSG 503 Principles and Practice of Community Health Nursing (6)
 - NSG 504 Advanced Concepts of Community Health Nursing (2)
- Functional Component 9 semester hours
 Each student will choose either nursing administration or nursing
 education as a functional focus.
 - A. Nursing Administration NSG 509 Community Health Nursing Administration NSG 510 Nursing Administration in Community Health

Settings (3)
Relevant electives selected under advisement (3)

B. Nursing Education

NSG 507 Curriculum Development in Nursing Education (3) NSG 508 Teaching Competencies in Nursing: Principles and Methods (3)

Relevant electives selected under advisement (3)

- III. Research Component 6 semester hours
 NSG 505 Nursing Research I (3)
 NSG 506 Nursing Research II (3)
- IV. Elective 3 semester hours
 Relevant electives selected under advisement
- V. Satisfactory performance on the written and/or oral comprehensive examination

Special Requirements

Insurance. Students are required to carry liability insurance coverage in the amount of \$1,000,000/\$3,000,000 when enrolled in nursing courses having a clinical component.

CPR Certification. Students enrolled in nursing courses having a clinical component are required to be currently certified by the American Red Cross, American Heart Association, or other acceptable resource in Life Support (two-person) Cardiopulmonary Resuscitation. The CPR course must include resuscitation of infants and children.

Health Requirements

Students enrolled in nursing courses having a clinical component must provide the Department of Nursing evidence of a current (within one year) health assessment performed by a physician or certified nurse practitioner. Documentation of inoculations against diphtheria, tetanus, measles, poliomyelitis, and hepatitis B must be included.

COURSE DESCRIPTIONS NURSING

Symbol: NSG

501 Nursing Theories and Issues (3) Exploration of a variety of theories and current issues that affect nursing practice, education, and administration.

502 Perspectives of Community Health Nursing (4) Introduction to concepts of public health and community health nursing. Includes both classroom presentations and clinical practicum in an agency of interest to the student, focusing primarily on community health care. PREREQ or CONCURR: NSG 501.

503 Principles and Practice of Community Health Nursing (6) Students will continue to refine the application of principles of community health during a second in the series of courses combining theory with practice. Continued emphasis on the political, governmental, and fiscal management aspects of community health nursing. PREREQ: NSG 502.

504 Advanced Concepts of Community Health Nursing (2) Seminar on advanced concepts of community health. No clinical practicum is associated with this course, which will be taken either prior to or together with the functional practicum. PREREQ: NSG 503.

505 Nursing Research I (3)

506 Nursing Research II (3) Critical analysis of research design and outcomes, using existing nursing research studies from the professional literature and existing computerized simulated research to develop skill in research modalities. PREREQ: NSG 505.

507 Curriculum Development in Nursing

Education (3) This course is designed to examine the theory and practice of curriculum development as a group process, synthesizing basic principles of curriculum in nursing education.

508 Teaching Competencies in Nursing — Principles and Methods (3) Examination of the teaching-learning process and skills in professional nursing, with emphasis on baccalaureate or in-service education. Includes both classroom and clinical practicum teaching experience, as well as seminars with other students enrolled. Focus is community health nursing throughout.

PREREQ: NSG 507.
509 Community Health Nursing Administration
(3) Principles of administration, leadership, and organization related to the delivery of community health nursing care. Organizational, management, power, decision-making, motivational and change theories will be examined in relationship to the community health nurse administrator.

510 Nursing Administration in Community Health Nursing Settings (3) Examination of management skills for nurse-administrators in a service setting in community health. Includes both classroom and clinical practicum administrative experience, as well as seminars with other students enrolled. Focus is community health nursing throughout. PREREQ: NSG 509.

For the sing throughout. FREKEQ. NOS 309.

511 Measurement and Evaluation in Nursing Education (3) This course will focus on the application of principles of measurement and evaluation within nursing education. Practical experiences will include the construction and evaluation of classroom tests and clinical assessment instruments, as well as interpretation of standardized tests used within nursing education. Current trends and issues related to evaluation will be discussed.

513 Nursing Informatics (3) This course will focus on the current and potential impact of the microcomputer in the nursing arenas of practice, education, and administration. Basic concepts of computer literacy will be reviewed with lab exercises to assist those who are not computer literate. The course then will proceed from the history of nursing informatics and culminate with the future of nursing informatics

516 Cancer Nursing Practice (3) The emphasis of this course is the care of clients with cancer. This course examines the various physiological, psychosocial, and spiritual effects this disease has on clients and their families. A variety of topics will be discussed, including: communication, hope, sexuality, spirituality, loss, pain, and altered body image. The focus of the course is on the role of the professional nurse in prevention, diagnosis, and client management.

517 Selected Topics in Nursing (3) An in-depth study of selected, current topics relevant to the development of nursing majors. This course will emphasize the critical analysis of current topics that impact on professional nursing. Each student will develop a commitment to reading and critiquing nursing research in professional journals as part of the teaching-learning process.

520 Health Assessment in Advanced Nursing Practice (3) This course combines comprehensive theoretical and laboratory experience to enable the nurse in advanced practice to complete a holistic health assessment of the client. Opportunity is provided to enhance the participant's ability to collect relevant data via use of appropriate interviewing methods, developmental and physical assessment techniques, critical thinking, and psychomotor skills (two hours, lecture; three hours, laboratory).

Philosophy

103 Main Hall West Chester University West Chester, PA 19383 610-436-2841

Dr. Claghorn, Chairperson and Coordinator of Graduate Studies PROFESSORS

George S. Claghorn, Ph.D., University of Pennsylvania W. Stephen Croddy, Ph.D., Brown University Thomas W. Platt, Ph.D., University of Pennsylvania Stanley Riukas, Ph.D., New York University Paul A. Streveler, Ph.D., University of Wisconsin Frederick R. Struckmeyer, Ph.D., Boston University

ASSISTANT PROFESSORS

Frank J. Hoffman, Ph.D., University of London Ruth Porritt, Ph.D., Purdue University

Program of Study

The Department of Philosophy offers a program leading to the Master of Arts in philosophy. This degree will serve as a foundation for studies leading to a Ph.D. in philosophy or prepare students for positions in industry, government, or college teaching.

Admission Requirements

In addition to meeting general requirements for admission to a degree program at West Chester, applicants must present a minimum of 12

semester hours of undergraduate philosophy, including courses in history of ancient philosophy, history of modern philosophy, ethics, and logic.

Foreign Language Requirement

Candidates for the M.A. must demonstrate a reading proficiency in French, German, or Spanish.

Final Examination Requirement

A comprehensive, written final examination is required. This will cover four fields: (1) metaphysics; (2) any two from logic, ethics, aesthetics, philosophy of language, philosophy of science, or American philosophy; and (3) any agreed-upon philosopher, such as Plato, Aquinas, Kant, or Wittgenstein.

MASTER OF ARTS IN PHILOSOPHY

(30 semester hours)

All candidates are required to take PHI 599 and PHI 640. Beyond these requirements, the student has the choice of a thesis or nonthesis program.

The thesis program requires 18 semester hours in philosophy; six semester hours of electives, chosen from philosophy or related courses; and the thesis (PHI 610), which accounts for six semester hours.

The nonthesis program specifies 24 semester hours in the philosophy concentration and six semester hours of electives (philosophy or related).

COURSE DESCRIPTIONS PHILOSOPHY

Symbol: PHI

- 506 Meaning in Language (also LIN 506)(3) A discussion of topics having to do with meaning in everyday oral communication.
- 512 Ethical Theories (3) Examination of various ethical theories with practical applications to such problems as authority, punishment, rights, marriage, and race.
- 513 Aesthetic Theories (3) History of aesthetics, as seen in classic interpretations. Psychological and sociological origins of art; the role of art works in the enrichment of life.
- 514 Philosophy of Religion (3) Dominant trends in religious philosophy of the Western world. Religious language, reason and faith, science, the nature of man, the existence of God, and mysticism.
- 515 Existentialism (3) Background and themes of current existentialism, as reflected in Kierkegaard, Jaspers, Marcel, Heidegger, and Sartre.

- Evaluation of existentialism and its impact on contemporary literature, drama, art, and society.
- 520 Philosophy of Mind (3) The human mind, according to representative views. Presuppositions and implications, both scientific and philosophic, traced and analyzed. The mind-body problem, perception, memory, and the implications of depth psychology.
- 522 Philosophy of Science (3) The course begins with case studies in science and derives general principles from them. Scientific law, analogy, models, variant theories, confirmation, and interpretation.
- 523 Philosophy of Language (also LIN 523)(3) Problems of language and oral communication, with emphasis on problems of reference.
- 530 American Philosophy (3) American views of man, society, and the universe, from colonial times to the 20th century.
- ♦ 531 Oriental Philosophy (3) Central figures and classic teachings of Eastern philosophy and religion: Islam, Hinduism, Buddhism, Confucian-

- ism, Taoism, and Shintoism; naturalistic and humanistic elements of decisive influence on the culture of the Orient.
- 536 Symbolic Logic (3) Basic principles and methods of symbolic logic. Practice in determining validity of sentential and quantificational arguments. The algebra of classes.
- ♦ 590 Independent Studies in Philosophy (3)
- ♦ 599 Philosophic Concepts and Systems (3) Basic concepts of the philosophic enterprise: form, matter, the categories, cause, and purpose. Relation of premises to method and conclusions. Rival theories are compared for justification and adequacy.
- 610 Thesis (3-6)
- ♦ 640 Seminar (3) Study and evaluation of the major works of one philosopher, such as Plato, Aquinas, Kant, or Wittgenstein.

The following undergraduate course may also be taken for graduate credit, when properly approved: PHI 483 Philosophy of History.

♦ This course may be taken again for credit.

Physical Science

(Interdepartmental)

Dr. Pritchard (Geology and Astronomy) and Dr. Ahmad (Chemistry), *Program Coordinators*

Program of Study

An interdepartmental master's degree program is offered by the departments of Chemistry, and Geology and Astronomy. The program may be adapted to meet the needs of those who teach, plan to pursue graduate studies in other institutions, or prepare for careers in the physical sciences.

Leading to the Master of Arts degree, the program makes it possible for students to plan a sequence of studies meeting their individual needs. This may be accomplished either through selections from each of the disciplines or by concentrating in one of them.

Admission Requirements

Students entering the program are normally expected to have a bachelor's degree in science or science education and, if teaching in the public schools, a valid teaching certificate.

MASTER OF ARTS IN PHYSICAL SCIENCE

(34 semester hours)

Students majoring in this program must take 34 semester hours of course work and successfully complete a comprehensive examination. Those taking their courses in the Department of Geology and Astronomy will be expected to complete a six-hour thesis as part of the required 34 semester hours.

This program is developed, under advisement, from course selections in chemistry, mathematics, geology, astronomy, and science education. Normally, course work is restricted to these areas. However, exceptions may be made under special circumstances. Consult with the appropriate department graduate coordinator.

Near the end of the program, the student must pass a comprehensive examination that will demonstrate subject matter knowledge, as well as an ability to observe, analyze, integrate, synthesize, and understand the broad physical concepts related to the course of study. Consult with the appropriate department.

For descriptions of course offerings, see the sections covering the departments of Chemistry, Geology and Astronomy, and Mathematics and Computer Science.

Political Science

207 Ruby Jones Hall West Chester University West Chester, PA 19383 610-436-2343

Dr. Shea, Chairperson Mr. Burton, Public Administration; Adviser Dr. Milne, Director, M.S. in Administration; Coordinator of Graduate Studies

PROFESSORS

Robert J. Marbach, Ph.D., Temple University James S. Milne, Ph.D., Temple University John C. Shea, Ph.D., University of Pittsburgh

ASSOCIATE PROFESSORS

William F. Burns, M.A., Case Western Reserve University A. Wayne Burton, M.A., University of Pennsylvania David S. Eldredge, M.A.T., Harvard University Lawrence V. Iacono, M.Ed., West Chester University Bhim Sandhu, Ph.D., University of Missouri James G. Smith, Ph.D., Indiana University at Bloomington

ASSISTANT PROFESSORS

Yury Polsky, Ph.D., University of Michigan Frauke Schnell, Ph.D., State University of New York at Stony Brook

INSTRUCTOR

Jay P. Brenneman, M.A., University of Tennessee

Programs of Study

The Department of Political Science offers the Master of Science in Administration with a concentration in public administration. This is an interdisciplinary degree described in the section on the Master of Science in Administration.

MASTER OF SCIENCE IN ADMINISTRATION

Concentration in Public Administration

(36 semester hours)

Required: Administration Core 18 semester hours ADM 501, 502, 503, 504, 505, and 506 or 507

Option 1: Public Administration Core* 18 semester hours

Focus on state and local government

ADM 500 Methods and Materials of Research (3)

ADM 600 Research Report (3)

GEO 525 Urban and Regional Planning (3) GEO 527 Planning Law and Organization (3)

PSC 544 American Public Policy (3)

PSC 549 Politics of Bureaucracy and Administrative Behavior (3)

Option 2: Individually Contracted Public

Administration Core* 18 semester hours Specialized focus, taken under advisement, to meet the student's career goals and needs

ADM 500 Methods and Materials of Research (3)

ADM 600 Research Report (3)

PSC 544 American Public Policy (3)

PSC 549 Politics of Bureaucracy and Administrative Behavior (3) Elective (3)

Elective (3)

The objective of option 2 is to allow students to select courses from University graduate programs to tailor a program suitable to their career goals or specialized needs.

Both concentration options allow for an internship experience (ADM 612 Internship) of 3-6 semester hours, depending on prior student preparation. Students with little or no organizational work experience may be required to successfully complete ADM 612 as an additional 3-6 hours in the concentration.

A comprehensive examination in the concentration is required. The examination will be based on core and concentration course work.

*Students with undergraduate majors in political science may be permitted, under advisement, to substitute appropriate courses.

POLITICAL SCIENCE Symbol: PSC/PAD

515 Women in Politics (3) The role of women in politics is surveyed. Considerations include the relationship between the sexes as it has an impact on politics.

525 The American Presidency (3) Analysis of the presidency, stressing its evolution into a modern institution and the contemporary behavioral aspects of the office. Personality, power, and campaign strategy in conjunction with presidential relations with the executive branch, Congress, courts, and the media.

531 Modern Political Theory (3) Critical analysis of enduring political problems as seen primarily in the writings of theorists from Machiavelli to the present; basic concepts of political science; theories concerning the proper role of the state in society.

532 International Relations (3) Factors motivating the actions of nations; machinery evolved by nation states for effecting their various policies.

Methods of diplomacy, international law, and international organization.

533 Congressional Politics (3) The politics of, and the legislative process in, Congress. Internal influences on the Congressional performance, such as rules, norms, and behavior, and external influences including the executive branch and interest groups.

534 American Political Parties (3) Patterns, functions, and history of the American political party system at national, state, and local levels. Theoretical and empirical studies of political interest groups, public opinion, and voting behavior.

540 American Constitutional Law (3) Evolution of constitutional law through study of the leading decisions of the Supreme Court and their significance for the American governmental system. 541 Latin American Culture and Politics (3) Comparative analysis of contemporary Latin-American systems. Stress of political culture, decision making, ideologies, and political processes.

542 Dynamics of Public Opinion and Political

Behavior (3) The political role and style of masses and elites; uses and abuses of polls, political socialization, voting behavior, campaigning, and media. Understanding individual opinion formation (micro) and mass publics (macro).

544 American Public Policy (3) Survey of literature; examination of approaches; discussion of concepts and issues in the field of American politics and policy processes.

548 The Communist Powers (3) Comparative study of various Communist systems, particularly the U.S.S.R. and China. Elite-mass relationships; role of Marxism-Leninism; party, economic, and political structures. Secondary attention to Eastern Europe, Cuba, and nonruling parties.

549 Politics of Bureaucracy and Administrative Behavior (3) In-depth examination of the fourth branch of government. Impact of administrative apparatus (bureaucracy) on public policy formulation and implementation in the United States.

551 The Politics of Non-Western Areas (3) Problems of nation building, political participation, and elite-mass relationships in the less-developed nations. Latin American, Asian, or African nations may be stressed as a case study. 552 Civil Liberties and Civil Rights (3) Analysis of constitutional rights and governmental attitudes with respect to civil liberties. Emphasis on case-study method and role playing.

560 The Politics of Revolution (3) Synthesis of research, concepts, and theories of revolution. Stress on the meaning, causes, phases, and ideologies of revolution. Contemporary movements emphasized.

PAD 561 State and Local Government (3) Examination of the organization, functions, and politics of state and local government, including

analysis of politics in states, counties, cities, and towns in urban, suburban, and rural areas. Intergovernmental relations in education, transportation, and welfare policy are examined.

PAD 573 American Intergovernmental Relations (3) Designed to familiarize students with the complex network of conflict, cooperation, and interdependence among national, state, and local government units. Topic areas include an analysis of continuing evolution of American federalism, an examination of this relationship from state and city government perspectives, and a description of specific intergovernmental fiscal programs and policies.

590 Independent Studies in Political Science

(1-3) Research projects, reports, and readings in political science. PREREQ: Approval of department chairperson.

ADMINISTRATION Symbol:ADM

500 Methods and Materials of Research (3) Logic of scientific methodology research design construction. Stress on hypothesis development and testing, data collection, measurement problems, and theory application.

600 Research Report (3)

612 Internship (3-6) Intensive field placement in organization under faculty guidance and supervision. Precontracted learning objectives.

Psychology

114 Rosedale Avenue West Chester University West Chester, PA 19383 610-436-2945

Dr. Pollak, Chairperson

Dr. Duncan, Assistant Chairperson and Coordinator of Graduate Studies

PROFESSORS

Mary E. Crawford, Ph.D., University of Delaware Phillip K. Duncan, Ph.D., University of Florida V. Krishna Kumar, Ph.D., University of Wisconsin-Madison Samuel F. Moore, Ph.D., University of Cincinnati Walena C. Morse, Ph.D., Bryn Mawr College Edward I. Pollak, Ph.D., University of Connecticut Jack Porter, Ed.D., Temple University Louis H. Porter, Ph.D., Howard University Harold R. Sands, Ph.D., Pennsylvania State University Edward D. Smith, Ed.D., Pennsylvania State University Thomas Treadwell, Ed.D., Temple University

ASSOCIATE PROFESSORS

Arvid Bloom, Ph.D., Colorado State University Deborah Mahlstedt, Ph.D., Temple University Robert R. Shinehouse, M.A., Temple University

ASSISTANT PROFESSORS

Sandra Kerr, Ph.D., State University of New York at Stony Brook Jasmin T. McConatha, Ph.D., University of Georgia Michael J. Renner, Ph.D., University of California at Berkeley Deanne L. Zotter Bonifazi, Ph.D., Kent State University

Programs of Study

The Department of Psychology offers the Master of Arts degree with concentrations in clinical psychology, industrial/organizational psychology, general psychology, and group psychotherapy/processes. The Department of Psychology also cooperates in offering the M.S.A. degree in human resource management by teaching appropriate courses in industrial psychology.

Admission Requirements

The minimum admission standards for the Department of Psychology are an undergraduate GPA of 3.0; a psychology GPA for three or

more courses of 3.25; GRE or MAT scores in the 40th percentile or above; advanced psychology portions of the GRE (undergraduate psychology majors only), and three letters of reference. An interview with the Department Admissions Committee also may be required. Typically, admissions are made on a once-a-year basis with February 15 serving as the application deadline. Students accepted into a concentration may, with the approval of the Graduate Committee, transfer to another concentration. A few applicants who do not fully meet the outlined admission requirements may be admitted on a provisional basis depending on their maturity, relevant work experiences, and academic promise.

MASTER OF ARTS IN PSYCHOLOGY

(33-51 semester hours)

Several degree options are offered. The Master of Arts degree is offered with a concentration in clinical psychology for students who wish to work in a mental health setting or to continue their education at the doctoral level. A concentration in general psychology is offered for students interested in research, teaching, or in continuing their graduate studies. The concentration in group psychotherapy/ processes prepares students for professional service in community mental health/hospital, education, and organizational systems. Specialized training is provided in group psychotherapy, psychodrama, and sociometry. This program conforms to the academic requirements for certification as a psychodramatist, specified by The American Board of Examiners in Psychodrama, Sociometry, and Group Psychotherapy. The concentration in industrial/organizational psychology is designed for students interested in employment in business or industry or for those who wish to continue their education at the doctoral level in a related area

In addition, the Department of Psychology has a cooperative agreement with the school psychology and educational psychology programs at Pennsylvania State University. Students in the West Chester University psychology master's degree programs who qualify are given early admission consideration to these programs, and receive credit toward the Ed.D. or the Ph.D. for course work completed at West Chester University. For details, see the department's graduate handbook. Students may have to take one or more courses during the summer to complete their program. All students who expect to obtain an M.A. in psychology are required to pass a comprehensive examination. However, the comprehensive examination will be waived for those students who elect to write a thesis.

More details about the program are available in the department's graduate handbook.

Concentration: Clinical Psychology

(40-42 semester hours)

The clinical concentration involves taking 30 semester hours of required course work: PSY 502, 506, 512, 517, 524, 527, 544, 549, 559, and 595. Students also are required to take six semester hours of electives selected from PSY 464, 480, 490, 509, 513, 530, 543, 550, 562, 565, 600, and 610. In addition, a 4-6 semester-hour clinical practicum (PSY 615) is required. Students should make every effort to take the following core courses first: PSY 502, 506, 512, 517, and 524.

Concentration: General Psychology

(33-36 semester hours)

The following 15 semester hours of course work are required: PSY 502, 506, 512, 517, and 524. All students in this concentration are required to complete a research report (PSY 600) and write a thesis (PSY 610). All students also must complete 15 semester hours of electives. Subject to approval, six of the elective credits may be taken from the graduate offerings of other departments. The departmental courses allowed as electives are PSY 445, 464, 475, 480, 490, 509, 527, 530, 550, 562, and 565 (Note: No more than six semester hours of 400-level courses are allowed as electives.)

Concentration: Group Psychotherapy/Processes

(45-51 semester hours)

The group psychotherapy/processes concentration involves 33 semester hours of required course work (EDC 567, PSY 502, 512, 513, 514, 517, 543, 547, 550, 559, and 595). The student also must complete two of the following courses: PSY 527, 544, 549, or 562. In addition, a three-semester-hour clinical practicum (PSY 615), for which the preceding courses serve as prerequisites, is required.

Another requirement is completion of either a thesis (PSY 610) or research report (PSY 600).

Concentration: Industrial/Organizational Psychology

(36-39 semester hours)

The industrial/organizational concentration includes 21 semester hours of required course work (PSY 502, 506, 524, 560, 562, 563, and 566). A three-credit internship (PSY 630) and a 3-6 credit research experience (PSY 600 and/or PSY 610) also are required. In addition, students must take 3-5 elective courses which, in combination with their internship and research experience, will enable them to explore a particular aspect of the field in greater depth. The elective courses may be taken outside of the Department of Psychology. Courses restricted to clinical psychology majors cannot be taken as electives. With careful selection of electives, internship, and research focus, students will be able to develop specialization in performance analysis and training, personnel evaluation and placement, or aspects of group and organizational processes in industrial/organizational psychology.

MASTER OF SCIENCE IN ADMINISTRATION

Concentration: Human Resource Management

(36 semester hours)

The Department of Psychology participates in an interdisciplinary degree program leading to a Master of Science in Administration with a concentration in human resource management. (See the section describing Administration.)

Concentration: Training and Development

(36 semester hours)

The Department of Psychology participates in an interdisciplinary degree program leading to a Master of Science in Administration with a concentration in training and development. (See the section describing Administration.)

COURSE DESCRIPTIONS* PSYCHOLOGY

Symbol: PSY

501 Introductory Statistics for the Behavioral Sciences (3) Central tendency, variability, standard scores, correlation, probability, sampling, tests of hypotheses, "t" test, chi square, distribution-free statistics, and introduction to analysis of variance. PSY 501 is particularly recommended for those who are weak in, or have not previously been exposed to, behavioral sciences statistics.

502 Advanced Statistics for Behavioral Sciences (3) This course covers inferential statistical techniques with emphasis on application to research in psychology and related areas. PRE-REQ: PSY 501 or equivalent.

506 Theories of Learning (3) Survey and critical review of existing theories of learning and relevant research data.

509 Advanced Social Psychology (3) Emphasizes contemporary approaches to the study of social behavior including cognitive, social, and experimental and quasi-experimental research methodology.

512 Psychology of Personality (3) The interaction and effects of forces that influence personality development. Normal and neurotic development are contrasted. Principles of personality measurement are explored.

513 Theory and Practice of Psychodrama (3) This course introduces theory and practice of psychodrama as a psychotherapeutic modality, emphasizing psychodramatic and sociometric techniques. It gives each person a chance to participate in using sociometry and psychodrama

techniques and integrates the theoretical with the applied components of psychodrama.

514 Theory and Practice of Psychodrama II
(3) Continuation of PSY 513 at an advanced level with emphasis on clinical sociometry, the social atom concept, auxiliary ego techniques, and directing. Instruction will include both didactic and experiential modes.

517 Psychopathology (3) Advanced study of abnormal human behavior and a description of pertinent types, including symptoms, causes, and treatment. Current and recent theoretical approaches and research findings relevant to the etiology and treatment of these disorders. PRE-REQ: An undergraduate course in abnormal psychology and PSY 512, or equivalents, or permission of instructor.

524 Psychometrics (3) A survey of measurement theory in psychology with emphasis on the logic of measurement, scaling models, statistical methods, construction of valid and reliable measures. PREREQ: PSY 501.

broadles. Tracked, 137 301.

526 Program Evaluation (3) A survey of procedures for planning and evaluating programs in psychology, education, government services, health and welfare, etc. Topics include needs analysis, statement of objectives, definition and verification of treatment, operational measures, evaluation design, analysis/interpretation of data, and report writing. Case studies of evaluation from a variety of disciplines will be reviewed.

527 Behavior Modification (3) Application of learning principles and environmental control to behavior change. Foundation principles, tech-

niques, and assessment methods of modification.

PREREO: PSY 506 or equivalent.

530 Human Sexual Behavior (3) The study of those variables under which human sexual behavior functions. Research from sociological and medical studies is integrated with psychological knowledge.

543 Psychology of Group Processes (3) Survey of psychological group processes, tracing the origins and historical development of the major theoretical orientations.

544 Individual Psychometric Techniques: Wechsler and Binet Scales (3) Historical development, administration, scoring, and interpretation of the Wechsler and Binet scales. PREREQ: PSY 501 and PSY 524 or equivalent. By permission only (usually restricted to clinical psychology majors). 547 Human Intimacy (3) A study of processes and factors in establishing, maintaining, and terminating relationships via the use of group methods.

549 Projective Techniques and Personality Testing (3) History and theory of personality testing. Introduction to administration, scoring, and interpretation of projective techniques. PRE-REQ: PSY 517 or equivalent, and PSY 524. Clinical psychology majors, or others with permission of instructor.

550 Independent Studies in Psychology (1-3) Research projects, reports, and readings in psychology. PREREQ: Approval of department

*All courses in the Department of Psychology are restricted to those students who have been admitted to a degree program by the Department of Psychology, or to those who have received special permission to register for a course from the Department of Psychology graduate coordinator.

graduate coordinator.

559 Psychotherapy (3) Theoretical considerations, principles, techniques, and problems involved in counseling and psychotherapy. Usually restricted to clinical psychology majors. PRE-REQ: PSY 512 and 517 or equivalents.

560 Industrial Psychology (3) Application of individual differences, learning, and aptitudes to functions such as personnel selection, placement,

training, and evaluation.

562 Organizational Psychology (3) Focus on the relation between the individual and the organization. Elements of the organization that affect behavior are considered. Research designs appropriate to individual cases are presented. 563 Performance Analysis (3) An

accomplishment-based approach to the analysis of human performance. Topics include measurement and analysis of performance opportunities and strategies for improving performance.

564 Human Factors (3) Methods and results of experimental psychology pertinent to human-machine relationship problems. Workplace design, systems approach, control and display, and manin-space challenges are considered.

565 Psychology of Women (3) A study of behaviors and experiences of women; biological, cultural, interpersonal, and intrapersonal determinants of women's actions, thoughts, and feelings are explored.

566 Seminar in Industrial/Organizational Psychology (3) Recent technical, legal, social, and ethical aspects of the field are covered. Affirmative action and assessment, equal opportunity, minorities and women in the work force, and other pertinent issues are emphasized.

567 Training and Psychology (3) An overview of the training process in organizations. Topics range from needs analysis to evaluation of training programs.

590 Topical Seminar in Psychology (1-3)
Special topics in psychology not offered under
existing regularly offered courses. PREREQ:
Consent of instructor or graduate coordinator.
595 Clinical Psychology (3) Survey of clinical
techniques used in assessment and treatment of
personality disorders. Restricted to clinical
psychology majors. PREREQ: PSY 512 and 517.
600 Research Report (3) An original review of
the literature.**

610 Thesis (3-6) An original empirical study. PREREQ: Permission of graduate coordinator.** 615 Clinical Practicum in Psychology (2-6) Supervised professional participation in applied psychological activities, or projects in cooperating agencies and institutions. PREREQ: PSY 502, 506, 512, 517, 524, 544, 559, and 595. Restricted to clinical psychology majors and recommendation of graduate clinical faculty.**

620 Practicum in School Psychology (3) Supervised experience as a school psychologist. Offered for students seeking out-of-state certification as a school psychologist. (West Chester University does not presently offer a program leading to certification as a school psychologist in the Commonwealth of Pennsylvania.)

630 Internship in Industrial/Organizational Psychology (3) Supervised professional participa-

tion in applied psychological activities within a business or organizational setting. PREREQ: Permission of instructor.

The following 400-level course is frequently taken for graduate credit.

445 Organizational Development (3) Major theoretical, research, and applied issues in organizational diagnosis and change. Class sessions are experientially oriented.

These additional 400-level courses may be taken for elective graduate credit with the permission of the course instructor and the student's program adviser, and/or the Department of Psychology graduate coordinator: PSY 443 (Psychology of Group Processes); 445 (Organizational Development); 464 (Physiological Psychology); 470 (Sensory and Perceptual Processes); 475 (Cognitive Psychology); 480 (Neuropsychological Rehabilitation); 490 (Topical Seminar in Psychology). Descriptions of these courses can be found in the current West Chester University Undergraduate Catalog.

Requirements in addition to those existing for undergraduates are imposed for any 400-level course taken for graduate credit. No more than six credits of 400-level course work may be applied toward a graduate degree.

**While work on these courses may be completed any semester, students are encouraged to enroll for them during the summer sessions. Courses may be cancelled or the semester changed as required by enrollment. Summer courses depend on adequate enrollment.

Reading—See Childhood Studies and Reading Secondary Education—See Counselor, Secondary, and Professional Education

Sociology—See Anthropology and Sociology

Special Education

309 Recitation Hall West Chester University West Chester, PA 19383 610-436-2579

Dr. Finkel, Chairperson

Dr. Zlotowski, Coordinator of Graduate Studies

ASSOCIATE PROFESSORS

Judith S. Finkel, Ph.D., Union Graduate School Deborah A. Nickles, M.S., Syracuse University Martin Zlotowski, Ph.D., Michigan State University

ASSISTANT PROFESSOR

George P. Drake, Jr., Ph.D., University of Virginia

Programs of Study

The Department of Special Education offers programs leading to the Master of Education in special education. The department also offers a program leading to certification in special education. THE MASTER OF EDUCATION PROGRAM ALONE DOES NOT LEAD TO LEVEL I CERTIFICATION IN SPECIAL EDUCATION.

MASTER OF EDUCATION IN SPECIAL EDUCATION

Admission Requirements

All candidates must meet the general requirements for admission to a degree program at West Chester University, listed under Admission.

The Department of Special Education requires a 2.50 undergraduate GPA and a 2.75 in the candidate's major field.

The following items should be returned with the completed application form to the Office of Graduate Studies and Sponsored Research:

- I. A copy of the applicant's Pennsylvania Instructional I Certificate
- An extended statement describing the applicant's interests, needs, and goals, including the applicant's interest in taking graduate study
- 3. Evidence of an acceptable score on the Miller Analogies Test Applicants must arrange for an interview with the chair or graduate coordinator of the Department of Special Education. Arrangements

are made through the department secretary.

Failure to complete any of these application requirements will result in provisional matriculation status and will limit the number of courses the student may take.

Degree Requirements

- 1. The student must apply to be admitted to candidacy after the completion of 12 credit hours of work at West Chester University, including EDF 510 and two courses from the Special Education Program, one of which must be EDA 541. Grade point averages (GPAs) must be consistent with standards required in graduate studies at West Chester University (minimum cumulative GPA of 3.0).
- 2. The student must pass a comprehensive examination after the completion of a minimum of 24 semester hours of work or a maximum of 30 semester hours. The student must file a written request with both the chairperson and the graduate coordinator to take the examination. The request should be filed no later than six weeks prior to the date of the examination. The examination may be taken twice, but a semester interval is required between failure and re-examination. A student who fails the examination twice must obtain approval of the department to take it a third and final time.
- 3. The student must complete all degree requirements with a minimum cumulative GPA of 3.0.

MASTER OF EDUCATION IN SPECIAL EDUCATION

Program Description

The program is offered on a thesis or nonthesis basis:

Option A: (30 semester hours plus thesis)

The student will complete nine hours in Area I, 12 hours in Area II, nine hours in Area III, and EDA 591.

Option B: (36 semester hours)

The student will complete nine hours in Area I, 15 hours in Area II, and 12 hours in Area III.

Area I — Professional Education

EDF 500 Methods and Materials of Research in Education (3)

EDF 501 Methods and Materials of Research for Elementary Education (3)

EDF 510 Educational Foundations (3)

EDP 550 Advanced Educational Psychology (3)

Area II — Special Education

EDA 501 Prescriptive Teaching (3)

EDA 541 Psychology of Exceptional Children (3)

EDA 573 Developmental Assessment of Children with Learning Disabilities (3)

EDA 580 Current Issues and Trends (3)

EDA 581 Practicum: Special Education (3) (required in Option B)

EDA 591 Thesis and Research (6) (required in Option A)

Area III — Concentration

Students will select an area of concentration under advisement. The concentration will consist of approved courses from one of the fol-

The Arts Communicative Disorders Counseling Instructional Media Physical Education Psychology Criminal Justice

Educational Research

Elementary Education Health Education Reading Secondary Education Special Education Urban Education Student-Designed Concentration

COURSE DESCRIPTIONS SPECIAL EDUCATION

Symbol: EDA

The following courses may be taken as electives by anyone in a graduate program, subject to approval from the department and the student's

chairperson.

500 Mainstreaming for Exceptional Students (3) Designed to acquaint classroom teachers with special education students who may be spending some portion of the day in a regular setting. Current regulations and ways of meeting educational needs will be reviewed.

501 Prescriptive Teaching (3) An attempt to guide the teacher to an awareness of the methods by which medical, psychological, behavioral, and academic diagnosis may be converted into relevant educational terms, providing for adequate follow through on specific recommendations. PREREQ: EDA 573.

541 Psychology of Exceptional Children (3) Psychology of children whose intellectual, physical, social, and/or emotional characteristics are significantly deviant from those of children whose needs are met through normal educational

544 Classroom Management (3) Exploration of current practices in the management and modification of behavior. The professional's role in achieving a better basis for meaningful communication with the special child. Problems that may interfere with teacher effectiveness are discussed. PREREQ: EDA 541 or equivalent.

572 The Emotionally Disturbed Child (3) A study of abnormal and atypical behaviors exhibited by disturbed students with emphasis on environmental contingencies and implications. Intervention and prevention strategies will be discussed.

573 Developmental Assessment of Children with Learning Disabilities (3) Diagnostic procedures and subsequent educational prescriptions

useful with students experiencing learning difficulties. PREREQ: EDA 541 or equivalent.

580 Current Issues and Trends (3) Current trends, problems, and issues in special education, teacher education, research, and administration will be explored. Emerging concepts relating to special education will be emphasized. PREREQ: EDA 541 or equivalent.

581 Practicum: Special Education (3) Offers students an opportunity to put skills gained through course work into practice under supervision from the department. Weekly seminar required. PRE-REQ: EDA 541 or equivalent.

590 Independent Study (1-3)

Thesis and Research (6) This course will provide the student the opportunity to learn how to evaluate and interpret published research, to conduct a critical research review, and to develop and produce an original research paper. Offered on a two-semester basis with each part carrying three credits. PREREQ: EDF 500.

Teaching English as a Second Language

550 Main Hall West Chester University West Chester, PA 19383 610-436-2898

Dr. Godfrey, Program Coordinator

Diane O. Casagrande, Professor (Communication Studies) W. Stephen Croddy, Professor (Philosophy) Dennis L. Godfrey, Assistant Professor (English) John T. Kelly, Associate Professor (English) Garrett Molholt, Associate Professor (English) Cheri L. Micheau, Assistant Professor (TESL and Linguistics) Paul A. Stoller, Associate Professor (Anthropology)

Program of Study

The Master of Arts in Teaching English as a Second Language is an interdisciplinary program contributed to by the departments of Anthropology and Sociology, Communication Studies, English, Foreign Languages, and Philosophy. The program is designed for those preparing to teach English to students whose first language is not English. Students wishing to enter the program must consult the coordinator.

Admission Requirements

Note: At the present time, new students are not being admitted. In addition to meeting the general requirements for a master's degree at West Chester, the candidate must (1) present an acceptable baccalaureate degree, which includes at least 24 semester hours in the area of English/foreign languages/linguistics, at least six semester hours in the area of anthropology/psychology/sociology, and a course in teaching reading (which may be taken as a program elective if it is lacking); (2) take the verbal and quantitative tests of the Graduate Record Examination or the Miller Analogies Test if deemed necessary; (3) demonstrate adequate proficiency in a foreign language if the student is a native speaker of English, or adequate proficiency in English if the student is a nonnative speaker of English; and (4) fulfill the course requirements and pass a written and/or oral comprehensive examination, offered on the second Wednesday of October and March.

M.A. IN TEACHING ENGLISH AS A SECOND LANGUAGE (TESL) (33 semester hours)

Required Courses

24 semester hours

ENG 575, 576, 577, LAN 500, 502, 503; LIN 501, 503

Students submitting equivalent courses for any of the above may substitute, under advisement, courses from the groups below.

Electives

9 semester hours

Selected from the groups below. At least one course must be selected from Group 1.

Group 1: ENG 579; LIN 540, 555, and 580

Group 2: COM 515; ENG 578, 589, and 590; LAN 504, 505, 580, 590, 600, and 610; LIN 504, 505, 512, and 590; PHI 506 and 523

With the approval of the coordinator, students wishing to acquire certification in English while enrolled in this program may use up to six hours of electives for this purpose. Students who have completed a minimum of 24 semester hours in approved courses are eligible for a certificate in TESL.

For descriptions of courses under this program, TESL, see Communication Studies (COM), English (ENG), Foreign Languages (LAN), Linguistics (LIN), and Philosophy (PHI).

Women's Studies

211 Main Hall West Chester University West Chester, PA 19383 610-436-2464 Dr. Schlau, *Coordinator*

Helen Berger, Assistant Professor (Sociology)

Maria Boes, Assistant Professor (History)

Rebecca Brey, Assistant Professor (Health)

Jean Piper Burton, Assistant Professor (Library Services)

Diane Casagrande, Professor (Communication Studies)

Mary E. Crawford, Professor (Psychology) Anne Dzamba, Professor (History)

Celia Esplugas, Assistant Professor (Foreign Languages)

Robin Garrett, Assistant Professor (Nursing); Director,

Women's Center

Anne Herzog, Assistant Professor (English)

Jane Jeffrey, Assistant Professor (English) Patricia Johnson, Professor (History)

Mary A. Keetz, Professor (Childhood Studies and Reading)

Elizabeth Larsen, Professor (English)

Deborah Mahlstedt, Associate Professor (Psychology)

Mary McCullough, Associate Professor (Communication Studies)

Avis McDonald, Associate Professor (English) Lynette F. McGrath, Professor (English)

Patricia Patrick, Assistant Professor (Educational Services)

Ruth Porritt, Assistant Professor (Philosophy)

Geetha Ramanathan, Assistant Professor (English)

Arlene Rengert, Professor (Geography and Planning)

Stacey Schlau, Professor (Foreign Languages); Director

Women's Studies

Frauke Schnell, Assistant Professor (Political Science)
Carol Shloss, Associate Professor (English)
Mary Stieber, Assistant Professor (Art)
Karin Volkwein, Assistant Professor (Physical Education)
Richard J. Webster, Professor (History); Coordinator

Program of Study

American Studies

The Women's Studies Program consists of an interrelated group of courses offered in both arts and sciences and professional studies. Graduate courses include:

ECO 503 Economic Role of Women

EDE 589 Humanizing Teaching and Learning

ENG 523 Shakespeare's Sisters: Renaissance Women Writers

ENG 565 Comparative Literature Seminar

ENG 568 20th-Century Women Poets

ENG 580 Women Writing

PED 685 Women's Exercise and Sports

PSC 515 Women in Politics

PSY 565 Psychology of Women

WOS 530 Women in Leadership: Critical Issues

WOS 531 Management of Leadership: Laboratory Course

WOS 533 The Woman Executive: Research Seminar

Graduate students also may pursue a Master of Science in Administration degree with a concentration in "Leadership for Women." This concentration involves six courses in administrative skill areas and six additional courses which enable the student to develop a mode of leadership appropriate to workplaces in which access to organizational power is inequitable for sexes of equal training and talent. See the sections "Leadership for Women" and "Master of Science in Administration" for further information.

COURSE DESCRIPTIONS WOMEN'S STUDIES

Symbol: WOS

530 Women in Leadership: Critical Issues (3) Survey of the literature that defines and discusses critical issues for the woman leader. Some issues center around lifestyle choices and conflicts (loneliness, family pressure) and others around

organizational barriers and alternative means to overcome them.

531 Management of Leadership: Laboratory Course (3) The study and practice of alternative leadership modes. The course uses workshop techniques to teach speech, small-group dynamics, and other communication skills, and problemsolving strategies.

533 Woman Executive: Research Seminar (3) A seminar that requires each student to

complete an original project on the goals, problems, choices, or successes of women in middle- or upper-level management positions. The use of case studies, surveys, oral history, and other research techniques will be explored. An appropriate internship may be substituted for this course.

539 Independent Study (3) A project to be developed independently by the student working with a specific instructor.

Guide to Course Prefixes

Because many program descriptions		EDU	Counselor, Secondary and	MTE	Mathematical Sciences
refer to courses offered by other depart-			Professional Education	MTL	Mathematical Sciences
ments, the following guide to course		EDX	Counselor, Secondary and	MUE	Music Education
prefixes is provided.			Professional Education	MWJ	Music Theory and Composition
		ELB	Instrumental Music	MWP	Keyboard Music
ACC	Accounting	ELO	Instrumental Music	MWS	Keyboard Music
ADM	Administration, Leadership for	ENG	English	NSG	Nursing
	Women	ESL	Geology and Astronomy	NSL	Nursing
AER	Aerospace Studies	ESS	Geology and Astronomy	ORG	Keyboard Music
ANT	Anthropology and Sociology	FIN	Economics	PAD	Government and Planning
ARH	Art	FLM	English	PEA	Physical Education
ART	Art	FRE	Foreign Languages	PEC	Instrumental Music
ASA	American Studies	GEO	Geography and Planning	PEN	Instrumental Music
ASH	History, American Studies	GER	Foreign Languages	PHE	Geology and Astronomy
BEN	Instrumental Music	GRE	Foreign Languages	PHI	Philosophy
BIL	Biology	HAR	Keyboard Music	PHL	Physics
BIO	Biology	HEA	Health	PHR	Physics
BLA	Business Administration	HEB	Foreign Languages	PHS	Physics
BRC	Instrumental Music	HIS	History	PHY	Physics and Pre-Engineering
BUS	Economics	HON	Honors Program	PIA	Keyboard Music
CBA	Instrumental Music	HTR	Health	POR	
CHE	Chemistry	HUM	Women's Studies	PSC	Foreign Languages
CHO	Vocal/Choral Music	ICO	Instrumental Music		Government and Planning
CLS	Comparative Literature Studies,	IND	Geology and Astronomy	PSY	Psychology
	English	INS	Instrumental Music	PWP	English
COM	Communiation Studies	1TA	Foreign Languages	RES	Counselor, Secondary and
COR	Instrumental Music	JEN	Instrumental Music		Professional Education
CRI	Criminal Justice	JRN	English	RUS	Foreign Languages
CRL	Chemistry	KEN	Keyboard Music	SBA	Instrumental Music
CSC	Mathematical Sciences	KIL	Physical Education	SCB	Biology
DRC	Instrumental Music	KIN	Physical Education	SCC	Chemistry
ECE	Childhood Studies and Reading	LAN	Foreign Languages	SCE	Geology and Astronomy
ECO	Economics	LAT	Foreign Languages	SEN	Instrumental Music
EDA	Special Education	LEN	English	SOC	Anthropology and Sociology
EDC	Counselor, Secondary and	LIN	Foreign Languages	SPA	Foreign Languages
LDC	Professional Education	LIT	English	SPP	Communicative Disorders
EDE	Childhood Studies and Reading	LPN	Philosophy	SSC	Social Studies, Ethnic Studies, Peace
EDF	Counselor, Secondary and	MAB	Instrumental Music		and Conflict Studies
EDI	Professional Education	MAC	Keyboard Music	STA	Mathematical Sciences
EDG	Childhood Studies and Reading	MAK	Keyboard Music	STC	Instrumental Music
EDH	. 0	MAP	Instrumental Music	SWO	Social Work
EDH	Counselor, Secondary and Professional Education		Instrumental Music	SYO	Instrumental Music
EDM	and the second s	MAS		THA	Theatre Arts
EDM	Instructional Media	MAT	Mathematical Sciences	VOC	Vocal/Choral Music
EDO	Counselor, Secondary and	MAW	Instrumental Music	VOI	Vocal/Choral Music
EDD	Professional Education	MGT	Business Administration	WEN	Instrumental Music
EDP	Counselor, Secondary and	MHL	Music History	WIN	Instrumental Music
EDD	Professional Education	MIS	Management Information Systems	WOS	
EDR	Childhood Studies and Reading	MKT	Business Administration		Instrumental Music
EDS	Counselor, Secondary and	MSI	Military Science	W WC	monantima masic
	Professional Education	MTC	Music Theory and Composition		

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ALFRED D. ROBERTS, Foreign Languages

B. PAUL ROSS, Education

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WILLARD J. TREZISE, Biology

'EDWARD T. TWARDOWSKI, Health and Physical Education

'S. ELIZABETH TYSON, English

JOY VANDEVER, Music Education

EARLE C. WATERS, Health and Physical Education

SOL WEISS, Mathematical Sciences

THEODORA L. WEST, English

BENJAMIN WHITTEN, Keyboard Music

ARDIS M. WILLIAMS, Chemistry

LOIS M. WILLIAMS, Music

HARRY WILKINSON, Music

LLOYD C. WILKINSON, Physical Education

'JOSEPHINE E. WILSON, English

JAMES J. WRIGHT, Music Theory and Composition

EDWIN L. YOUMANS, Dean of Health and Physical Education Emeritus

'EDWARD ZIMMER, Music

CORNELIA ZIMMERMAN, Childhood Studies and Reading

'Deceased

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RICHARD W. FIELDS

1987

MARSHALL J. BECKER WACLAW SZYMANSKI

CHRISTOPHER BUCKLEY LARRY A. NELSON

1990 PAUL STOLLER

MARY E. CRAWFORD

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Merit Awards

1982-1983 DIANE O. CASAGRANDE MARY A. KEETZ JANE E. SHEPPARD CHARLES H. STUART

1983-1984 ELIZABETH A. GIANGIULIO KOSTAS MYRSIADES LOIS WILLIAMS

1984-1985 FRANK E. MILLIMAN RUTH I. WEIDNER

1986-1987 G. WINFIELD FAIRCHILD KOSTAS MYRSIADES

1987-1988 WALLACE J. KAHN STERLING E. MURRAY ARLENE C. RENGERT

1988-1989 PAMELA HEMPHILL

1989-1990 MADELYN GUTWIRTH JOAN HASSELQUIST

1990-1991 BENJAMIN WHITTEN

1991-1992 CHRISTOPHER BUCKLEY

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1993--1994 LOUIS CASCIATO

Irving Hersch Cohen Faculty Merit Award

DOROTHY NOWACK

GEORGE CLAGHORN

1003 JUDITH FINKEL 1994 RICHARD VELETA

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WALTER E. BUECHELE, JR., Service CARMELA L. CINQUINA, Service PHILLIP B. DONLEY, Service
GEORGE W. MAXIM, Teaching
EDWARD N. NORRIS, Service
PHILLIP D. SMITH, JR., Teaching WILLIAM TOROP, Teaching

ROBERT E. BYTNAR, Service

ANDREW E. DINNIMAN, Service IRENE G. SHUR, Teaching RUSSELL L. STURZEBECKER, Service

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1978-1979 ROBERT E. CARLSON, Service JOHN J. TURNER, JR., Teaching C. RALPH VERNO, Teaching ROBERT H. WEISS, Service

1979-1980 CAROLYN B. KEEFE, Teaching JOHN A. MANGRAVITE, Teaching PHILIP D. SMITH, JR., Service NORBERT C. SOLDON, Service

LOUIS A. CASCIATO, Teaching PHILIP B. RUDNICK, Service FRANK A. SMITH, JR., Teaching JANE B. SWAN, Teaching JOSEPH M. THORSON, Service

ACADEMIC CALENDAR 1994–95

FALL SEMESTER 1995

September 4 September 5 September 25 October 4 November 22 November 27 December 16-22

December 17 December 22

January 22

March 15 March 25

April 4

April 5

May 18

May 19

May 13-18

Rosh Hashanah* Yom Kippur*

Labor Day - residence halls open

Thanksgiving recess begins — 8 a.m. Thanksgiving recess ends — 8 a.m.

Examination period Commencement Fall semester ends

SPRING SEMESTER 1996

Classes begin - 8 a.m./Late Registration and Drop/Add

Classes begin - 8 a.m./Late Registration and Drop/Add

Spring break begins — 5 p.m. Spring break ends - 8 a.m.

Passover* Good Friday* Examination period Spring semester ends Commencement

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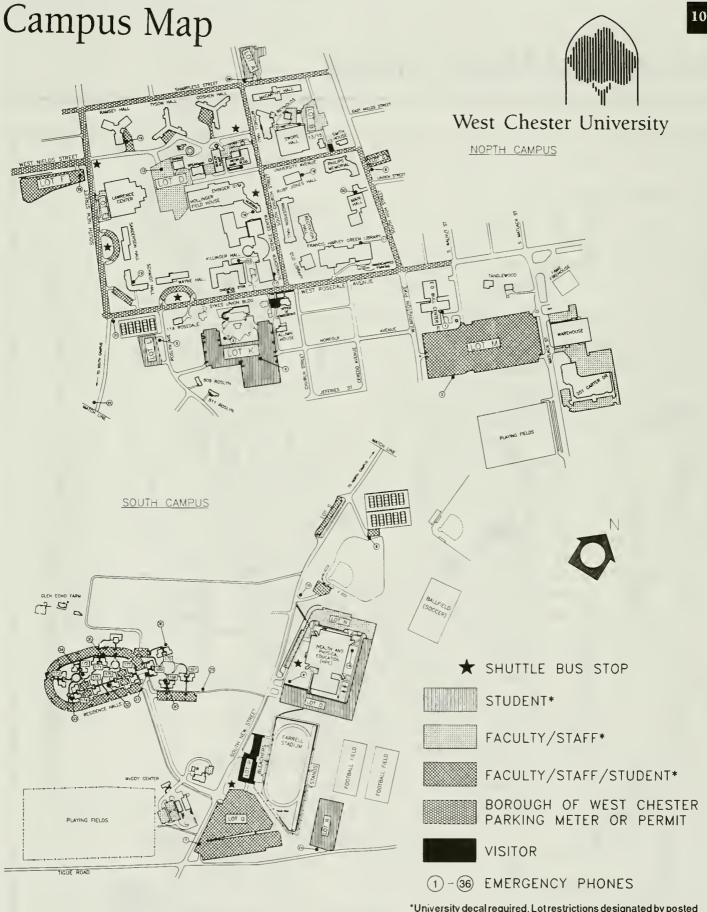
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*University decal required. Lot restrictions designated by posted signs, which takes precedent over published materials. Parking decals and enforcement subject to change as posted. A separate map designating parking for the handicapped is available at Public Safety in the Peoples Maintenance Building. Map prepared by Facilities Planning and Construction Division.

Borough of West Chester

